

MAY 1960

SOUTHERN AUTOMOTIVE JOURNAL

Assuring a Shop's Profit

page 45

We Turned \$S into \$S

page 47

Ann Arbor Mich
313 NO FIRST St
UNIVERSITY MICROFILMS
Convert"

page 64

SERVING THE 19 SOUTHERN AND SOUTHWESTERN STATES SINCE 1921

NEW HEAVY-DUTY OIL RING WITH TRI-COIL OFFSET SPRING

solves tough oil control problems—
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Exclusive new Perfect Circle tri-coil spring has maximum area of contact with the ring all the way around—provides more uniform pressure than an ordinary hump-type expander. This results in higher cylinder conformability with less friction.

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WASTE!

PREVENTS
SPOILAGE!

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Because of popular demand, now a dispenser for gallon cans (\$9.95 value) FREE with every order for four 12 lb. cans of Bondo.



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Volume 40

Number 5

Postmaster, Send notices by Form 3579 to 806 Peachtree St., N. E., Atlanta 8, Ga.

PERMATEX

News from the Chemical Workbench

SERVICE INFORMATION FOR THE PROFESSIONAL FROM PERMATEX



NEW 3-Ounce Size SOLVO-RUST Sets Up to Make "Silent Salesman" Display

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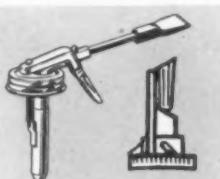
let stand, take it out—presto, the part comes clean! Permatex CPC is great for carburetors, gear assemblies—anything on the engine you need to clean. You can get it in 6-gallon drums, with or without dipping basket, and it will prove a time-saver in your daily operations. Permatex CPC is great for cleaning those greasy tools of yours, too.

Mechanics tell us that the newest addition to the Permatex line, Permatex Degreaser-Cleaner is one of the handiest products on the market today. And it's a perfect partner to Permatex Cold Parts Cleaner.

HELPING YOU—THE PROFESSIONAL—SELL

Permatex provides you with the promotional tools you need to sell Permatex Chemical Products. For instance, there's a new all-products wall-chart available that gives you the full line of products, where to use them, and the prices. Your Permatex Supplier has a copy for you. Also, available is a special sealants-application chart. There are other promotional items—check your supplier—or write us direct.

More Tips on FORM-A-GASKET®



1. Water Pump Seal. Apply a thin coat of Form-A-Gasket® No. 2 to both sides of the flange gasket to make a positive seal. Stops anti-freeze leakage.
2. For Vapor Lock Trouble. Coat the fuel pump and lines with Form-A-Gasket No. 2. It forms an effective insulation barrier at the hot spots.
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Car manufacturers recommend a regular wash and wax procedure in their owner manuals—it keeps the resale value of the car higher. That's why you should tie-in an outside Car Care special whenever you have a lube or tune-up special. Usually with a lube or tuneup it means the car is around your station a good part of the day—so you have the opportunity to wash, clean and wax the car.

Simplify The Job

Permatex makes a complete line of Polishes and Cleaners that are easy to use and meet every need: Perma-Lustre—cleaner-polish for enamel and lacquer body finishes; Chromium Polish—cleans and protects chrome parts; Fabric Cleaner—for all stains, spots and soiled areas. Removes tar, lipstick, gum, grease; Blue-Blazes®—removes dirt, grime from finishes. Leaves long-lasting silicone wax coating; Car Wash—powerful detergent action. Won't streak or hurt finish; Windshield Cleaner Concentrate—for automotive windshield washer reservoirs and spray bottles; Acrylic Cleaner and Polish—use on all acrylic finishes. Tar Remover—removes all tars, gums; safe for all acrylics.

Try It And See For Yourself

Order the Permatex Polishes and Cleaners you need. Check first hand how well this idea works.

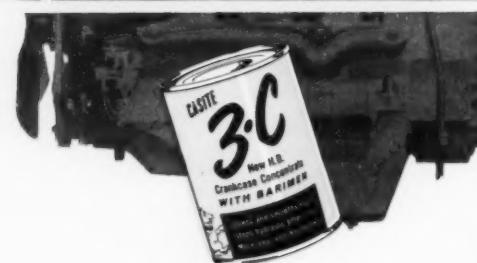


Do you have a service tip on a Permatex Product? You will get \$5 when it's published in "News from the Chemical Work Bench." Send it to:

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for automatic transmissions—CASITE SMOOTH-SEAL

Reduces jerks and roughness—assures smooth, quiet operation. Stops and prevents leaks due to hardening or shrinking of seals. Reduces shock and wear; enables delicate parts to last longer. List \$1.95.



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SOUTHERN AUTOMOTIVE JOURNAL

Covering Automotive Sales and Service

Vol. 40

MAY 1960

No. 5

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Member of Audit Bureau of Circulations
 Member of National Business Publications, Inc.

SUBSCRIPTION: \$1.50 a year or \$3.00 for three years.
 Foreign \$10.00.

Published monthly by
W. R. C. SMITH PUBLISHING COMPANY
 Atlanta, Ga., and Dalton, Ga.
 Editorial and Business Offices
 806 Peachtree Street, N. E., Atlanta 8, Ga.

Publishers also of

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UNICANS GUARANTEE:
 We will replace any defective can returned to us within 2 years of manufacture.

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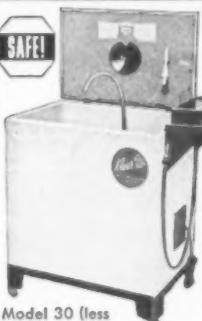
UNICAN PLASTICS CO., INC.

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CLEAN AUTOMOTIVE & INDUSTRIAL PARTS

3 WAYS!



1. Continuous Flow Hose
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- A must in every service shop!

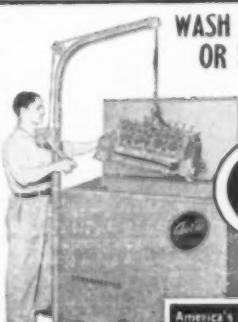
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WASH AN ENTIRE ENGINE BLOCK
 OR 300 LBS. OF PARTS . . .

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AUTOMATIC
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REDUCE OPERATING COSTS!

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America's Foremost Producer of Parts Cleaning Equipment

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*The new I.C.C. regulations state that after the compliance deadline (tentatively August 1, 1960) all vehicles engaged in interstate commerce—regardless of age—must be equipped to flash a traffic-hazard warning. YANKEE's new fleet products comply with this and all other requirements with reliability

and long-lasting performance to spare—all to your profit. And, with over 45 years of experience in the manufacture of quality automotive accessories, we can prove it. Find out how. Write today for your free copy of YANKEE's I.C.C. Guide.



757. Heavy-Duty Hazard-Warning Switch. For vehicles that use rear signals as combination tail, turn-signal and stop lights. 7-wire switch in YANKEE Blue-White Chrome Plate (ideal for passenger cars too). Heavy-duty flasher. Flashing pilot light. Under-dash mounting.

750. Economy Model Hazard-Warning Switch. For use on vehicles with existing turn signals. 3-wire switch is easy to install—no holes to drill. Heavy-duty flasher furnished. Will flash 1-6 lights simultaneously.



82. 3-In-Line Identification Light.



302. Jumbo 7" Stop Light. Rimless construction. 32 c.p. bulb. Four-way bracket has three mounting holes for $\frac{1}{4}$ " bolts. Bonderized. Finished in baked black enamel.



77. Streamlined Cab Light. Mounts on flat and slightly curved surfaces without disassembly. Rust-proof. Finished in triple-plated YANKEE Blue-White Chrome.



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730-736. "Turnflex" Turn-Signal and Hazard-Warning Switch. This is switch that successfully withstood amazing stress of 1,000,000 cycles of operation in test conducted by independent laboratory. Die-cast, finished in YANKEE Blue-White Chrome. Easily installed—no loose parts. Red disability pull-lever operates in neutral; automatically shuts off when signal lever is activated.

736. 7-wire. Combination turn-signal, stop, tail and hazard warning switch when used with double contact rear signal lamps. **730. 4-wire** turn-signal switch and hazard-warning signal.



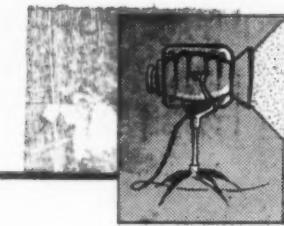
79. Snap-Lens Clearance Lamp. Screwdriver twist releases acrylic lens from non-rolling retaining ring. Lens snaps on, will not vibrate off!



302. Doorless Lens with plug connector.



139. 3" all-aluminum reflector with protecting flange. $4\frac{1}{2}" \times 3\frac{3}{8}"$ overall. Will not rust.



Automotive SPOTLIGHT

May 1960

Thank you, National Safety Council! The publishers are happy to learn that SAJ has been voted the National Safety Council's Public Interest Award for 1959. Said President Howard Pyle: "We here at the council know all you have been doing for safety and we are delighted that the judges agreed." The recognition resulted from the annual safety issue, published April of last year.

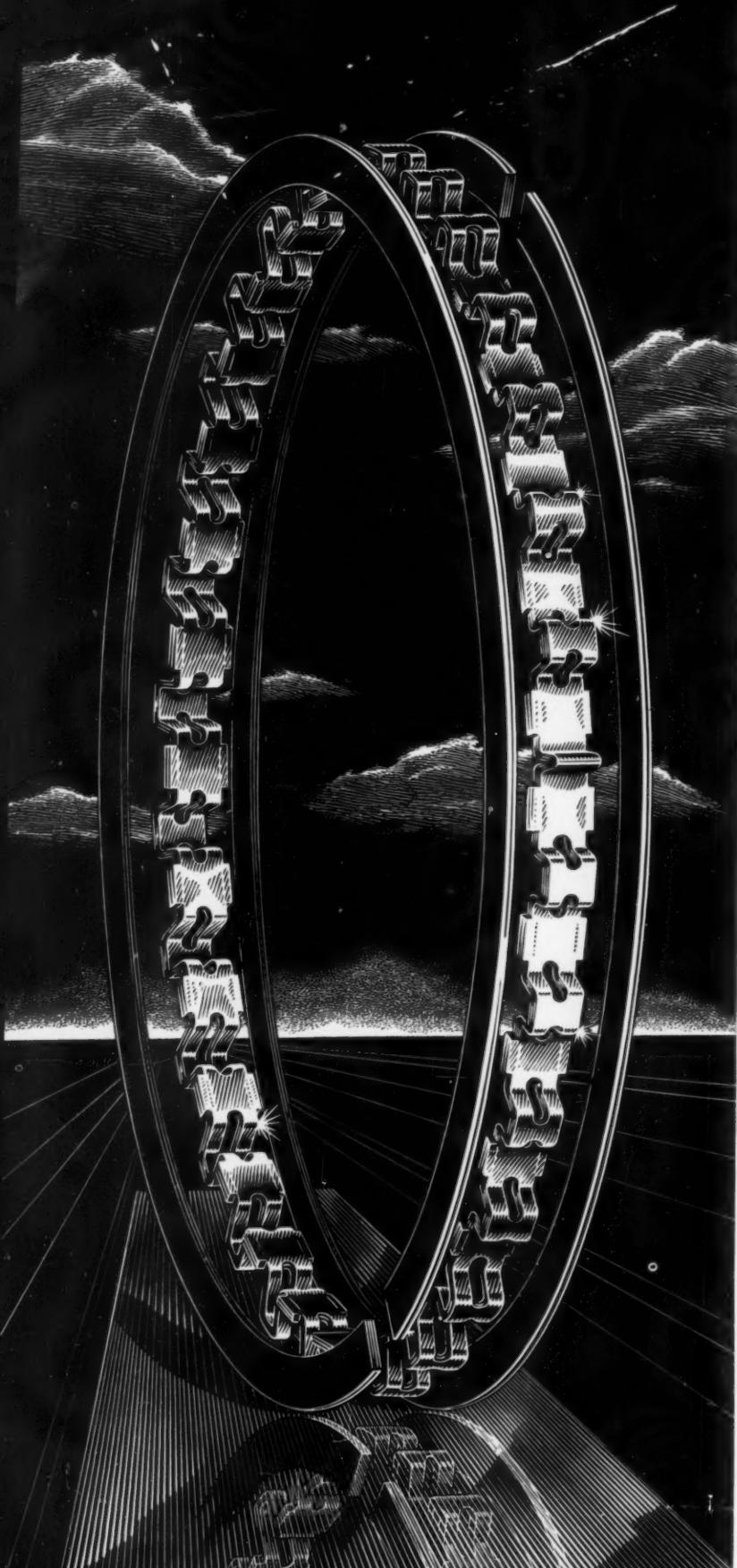
There's some good and some bad in unionized shops. One veteran franchised dealer, whose shop was one of the first in the South to become unionized, pointed out last month to editors that with the union, "Management and employes know where each stands and this makes things cut and dry, eliminating any favoritism which might be due an employe who has been with us a long time, etc." On the other hand, it has been difficult for this dealer to maintain the longer working hours which his non-unionized competitors have been observing. This is the dealer's chief bone of contention with the union operation.

"Functionality with thrift" is ahead for new cars. That's the outlook painted for North Carolina dealers at their 25th annual convention this month at Pinehurst by Ed Cole, Chevrolet's chief salesman and general manager. "Styling will be simple and unadorned," asserted the lively ex-Cadillac and Chevy chief engineer (page 146).

Will Mississippi have a motor vehicle safety inspection law? Its house has passed and sent to the senate a measure calling for the tests once a year at \$1.25. Talk continues in the Carolinas and Florida about proposing such a measure, but it's proven to be a long-hill pull.

Catching up on loose ends: James J. Nance, former top man at Studebaker-Packard and Mercury-Edsel-Lincoln Division, is the new president of Central National Bank at Cleveland, Ohio...."Tex" Colbert is Chrysler's new chairman of the board and Bill Newberg has moved up a notch to the presidency, with the jovial chairman-attorney expected to pay greater attention to dealer affairs. Dealers generally have shown great affection for the native Texan, while fewer have been close to Newberg....More people in the \$7,800-a-year-income class (and higher) are buying Imperials and Chrysler, says Bill Braden, Chrysler-Imperial's sales chief. It used to be people in the \$18,000-a-year-and-up class, he told SAJ editors while in Atlanta....Tax wheels were spinning at a record clip on America's highways last year. The nation's drivers paid out \$8.5 billion in state and federal taxes for owning and operating their motor vehicles. More than \$1.6 billion of this went into the U.S. general fund to be used for other than highway purposes. That would widen a lot of roads and fill a lot of chuckholes.

A Southern state is going to do some manufacturing for Autolite. As part of a developmental program, "the manufacture of certain automotive electrical products will be transferred from Toledo to a Southern state next year to enable the company to continue the manufacture of these products in this highly competitive business," said President Robert H. Davies of The Electric Autolite Co. April 28. "Welcome South, Brother!" has been the region's slogan for years, especially in late years, as its industrial expansion has blossomed ahead of the nation's.



SEALED POWER *Stainless Steel*

OIL RING

**does things
no other ring
can do!***

* Stainless steel resists corrosion—makes it virtually impossible for troublesome sludge and carbon deposits to build up. Overcomes oil ring plugging—oil pumping.

* Stainless steel maintains its original, built-in tension indefinitely so it delivers better oil control far longer than ordinary rings.

The unusually high number of spring tension points assures positive oil control even in tapered and out-of-round bores.

Side seals in piston groove—stops oil going around in back of ring—eliminates smoking.

End-abutment design produces ring tension independently of contact with bottom of piston groove—eliminates groove depth problems.

Chrome-plated, factory-seated side rails give instant oil control. Sealed Power Corporation, Muskegon, Michigan.



Preferred Performance

Sealed Power
KROME^X
PISTON RING SETS

PISTONS • • PINS • • SLEEVES AND
SLEEVE ASSEMBLIES • • VALVES
• • WATER PUMPS • • TAPPETS

STAINLESS STEEL OIL RING
U. S. PAT. NO. 2,789,872



Automotive MARKETS



President Latimer

Finance Executive Sees Moderate Car Sales

"I THINK the market for new cars will be more moderate than originally predicted but that profits should be better for dealers."

That's how a well-known Southern finance executive sized up the picture last month while attending the annual convention of the Automobile Dealers Association of Alabama at Biloxi, Miss.

Said E. P. Latimer of Charlotte, N. C., president of American Discount Co. and a past president of the American Finance Conference, in an interview with SOUTHERN AUTOMOTIVE JOURNAL:

"If the emphasis is off volume selling through gimmicks, the dealers can place the emphasis on more selective selling and they can boost their per-car profits.

"Finance companies are just not going to buy paper that doesn't have customer equity—a sufficient down payment, etc.—or that has extremely long terms."

What about 48-month contracts?

"Anything longer than 36 months," he replied, "is absolutely ridiculous. It is bad enough to have terms of 36 months as that takes a longer time for a customer to build any equity and keeps the

customer out of the market too long for a repeat sale."

His firm operates in the Carolinas, Florida, Georgia and Alabama.

Firestone Outlets to Add United Motors Service

UNITED Motors Service lines are being added to the Firestone TBA line, The Firestone Tire & Rubber Co. announced last month.

Commented Earl B. Hathaway, Firestone vice president—sales:

"More and more service stations are the accepted place for an automotive tune-up, i.e. the light repair and maintenance of automobiles. Through the years more motorists have turned to their service station dealer for gasoline, oil, tires and batteries.

"In recognizing the trend toward service stations as one-stop facilities for all car service needs, Firestone now will make available parts of original equipment quality to its dealers and stores throughout the country."

In addition to Delco batteries added to the Firestone TBA line last spring, the complete line of UMS products, providing virtually

100% coverage for all passenger cars and light trucks, includes Delco-Remy service parts, Packard cable products, Harrison thermostats, Delco shock absorbers and brake service parts, New Departure bearings, Rochester carburetor parts and Moraine gasoline filters.

A complete training program offered in 30 General Motors training centers is also available to Firestone dealers and stores.

Autolite Sales Show \$17 Million Gain

CONSOLIDATED net sales for The Electric Autolite Co. in the first quarter of this year amounted to \$59,776,315, an increase of \$17,887,142, compared with the corresponding period of 1959, according to Robert H. Davies, president, and J. P. Falvey, chairman of the board.

Net earnings in the first quarter of 1960 were \$2,285,420, or \$1.63 a share on the 1,401,988 common shares outstanding March 31, 1960.

In the first quarter of 1959, net earnings amounted to \$1,968,583, or \$1.25 a share on 1,569,487 shares outstanding.

It's Easy to Kill Customer Loyalty

LOYALTY of a car owner can be destroyed "by minor and relatively trivial matters," Chevrolet General Manager Edward N. Cole told the annual convention of the North Carolina Automobile Dealers Association May 7, and then listed these examples:

"A dealer's cashier refused to honor a check for service charges of a woman who had bought Chevrolets for 30 years. Lost: one customer.

"A man went into a competitive showroom to buy a station wagon, was taken through all the paper work, had his old car appraised and all but signed a contract. But never once was he shown a station wagon. Oh, yes: He bought a Chevy.

"Another owner changed brands—after 14 years with the same dealer—because the telephone operator mispronounced his name.

"Another ex-customer said he wouldn't go back to a dealership because 'they're a bunch of old crabs.'"

(For Cole's outlook on car designing, turn to page 146.)

*In the
automotive
service business...*

THERE'S NO BUSINESS LIKE CHEVROLET BUSINESS!

INDEPENDENT GARAGE OWNER:

"Sure appreciate your coming right over to help me out on that collision job last week."

CHEVROLET PARTS MANAGER:

"Well, that's one of our services. Any time we can assist you in estimating a repair job, give me a call and I'll be right over. Thanks for this order—you'll have the parts in a jiffy."

Here's why there's no business like Chevrolet business.

1. Over 17,000,000 Chevrolet cars and trucks on the road . . . more than any other make.
2. Your Chevrolet dealer can be your one-stop source for genuine Chevrolet parts.
3. Genuine Chevrolet parts are built of the same quality of materials and to the same rigid engineering specifications as the originals.
4. Your Chevrolet dealer can offer profit-building service aids to help you serve Chevrolet owners.

CHEVROLET DIVISION OF GENERAL MOTORS, DETROIT 2, MICHIGAN



Genuine Parts

MAKE YOUR CHEVROLET DEALER YOUR PARTNER IN SERVICE

...HE IS READY, WILLING AND ABLE TO SERVE YOU!



Automotive NEWS BRIEFS



Officers elected at the recent annual convention of the Independent Garage Owners of Kansas in Salina are (l. to r.): bottom row, Herman Stiles, second vice president; Mel Morris, reelected president, and E. E. Sanders, first vice president; back row, Al Greiving, Salina, reelected treasurer, and Roy Corfman, secretary. Through the cooperation of Salina jobbers and others over the state, according to Executive Director Art Kittell, this was the largest and best attended convention in the association's history. Speakers included Kittell, Ralph H. James, executive director of IGOA, and T. L. Webb, IGOA legal adviser.

JANUARY				APRIL				AUGUST				DECEMBER			
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17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
30	31														

Looking Ahead

DEALERS

May 13-14—Annual convention of South Carolina Automobile Dealers Association, Francis Marion Hotel, Charleston.

June 9—Annual convention of Delaware Automobile Dealers Association, Brandywine Country Club, Wilmington.

June 10-12—Annual beach outing-meeting of Automobile Trade Association of Maryland, Ocean City, Md.

June 13-15—Annual convention of New Mexico Automotive Dealers Association, Western Skies Hotel, Albuquerque.

Aug. 7-9—Annual convention of Georgia Independent Automobile Dealers Association, Henry Grady Hotel, Atlanta.

Aug. 14-17—Annual convention of Automobile Dealers Association of West Virginia, Greenbrier Hotel,

White Sulphur Springs.
Sept. 18-19—Annual convention of Kentucky Automobile Dealers Association, Sheraton Hotel, Louisville.

Oct. 23-25—Annual convention of Automotive Trade Association of Virginia, Hotel Roanoke, Roanoke.

Oct. 28-Nov. 2—Annual convention of Florida Automobile Dealers Association in Caribbean cruise in the Hanseatic.

Nov. 13-15—Annual convention of Mississippi Automobile Dealers Association, King Edward Hotel, Jackson.

Jan. 28-Feb. 1—Annual convention of National Automobile Dealers Association, San Francisco.

Feb. 3-7, 1962—Annual convention of National Automobile Dealers Association, New York City.

GARAGEMEN

July 7-9—Fifth annual convention of Independent Garage Owners of America, Dinkler Plaza Hotel, Atlanta, Ga.

WHOLESALE

June 1-4—Annual convention of

Automotive Engine Rebuilders Association, Netherland-Hilton Hotel, Cincinnati.

June 5-7—Annual convention of Automotive Wholesalers Association of Tennessee, Castle in the Clouds Hotel, Chattanooga.

June 14—Meeting at Hotel Marion, Little Rock, to organize a state association of parts wholesalers of Arkansas.

June 16-18—Annual convention of North Carolina Automotive Wholesalers Association, Biltmore Hotel, Morehead City.

June 26-29—Annual convention of Automotive Wholesalers Association of Alabama, Holiday Inn Motel, Dauphin Island, south of Mobile.

Aug. 25-27—Annual convention of Kentucky Automotive Wholesalers Association, Kentucky Hotel, Louisville.

Oct. 19-22—Annual convention of Automotive Wholesalers of Texas, Rice Hotel, Houston.

Nov. 16-17—Annual convention of South Carolina Automotive Wholesalers Association, Wade Hampton Hotel, Columbia.

Nov. 17-19—Annual convention of Florida Automotive Wholesalers Association, George Washington Hotel, Jacksonville.

Dec. 4-5—Annual convention of Georgia Automotive Wholesalers Association, Atlanta.

Feb. 13-15—Annual convention of Automotive Service Industry Association, Los Angeles.

Feb. 16-19—13th annual Pacific Automotive Show, Memorial Coliseum, Los Angeles.

GENERAL

Oct. 10-12—Annual trade show and convention of Automotive Parts Rebuilders Association, Conrad Hilton Hotel, Chicago.

Oct. 15-23—National Automobile Show, Cobo Hall, Detroit.

Oct. 31-Nov. 3—Annual convention of Automotive Warehouse Distributors Association, Muehlebach Hotel, Kansas City, Mo.

Alderson Dies in Lubbock

Walter G. Alderson, veteran of the automobile business in the South Plains area and president of Texas Automotive Dealers Association in 1949, died last month in Lubbock after a long illness. He founded Alderson Cadillac Co., but retired two years ago. At one time he was general manager and partner in Kuykendall Chevrolet Co.

Perfection!

It All Adds Up to Profit for You!

Starting Better with Echlin Ignition

Stopping Safer with United Brake Parts



ECHLIN Ignition

UNITED Brake Parts

THE ECHLIN MANUFACTURING COMPANY • BRANFORD, CONN., U.S.A.

UNITED PARTS DIVISION • CHICAGO, ILL.

ECHLIN IGNITION OF CANADA LTD., TORONTO

IGNITION & ELECTRICAL PARTS • SPEEDOMETER CABLES • HYDRAULIC & POWER BRAKE PARTS • BRAKE CABLES



The XP-700 Corvette is the latest in a series of experimental cars by which Chevrolet tests the practicality of new devices. Twin purposes of the vehicle are to test advance design and safety ideas. Included in the innovations are a glare-eliminating "bubble top," a new idea in cockpit air circulation, periscope-type rear-vision mirror, brake-cooling air scoops and a "floating" grille guard. The chassis is conventional Corvette production.

Valiant Dealers Install Wellford and Fisher

DIRECTORS of the newly-formed Valiant Advertising Association for the Memphis region, made up of Valiant dealers in Arkansas, Louisiana, Mississippi and the western half of Tennessee, last month installed John Wellford and John T. Fisher, Jr., both of Memphis, as chairman and secretary, respectively.

Sidney Robinson of Jackson, Miss., was elected treasurer and Ashley Dabbs of Clarksville, Tenn., delegate at large. Other board members are H. W. McLeod of Greenwood, Miss., Ralph Moran of Baton Rouge, La., Fred Poe of N. Little Rock, Ark., E. J. Richaud of Houma, La., and Bill Brown of El Dorado, Ark.

72 San Antonians Take "Automatics" Course

SEVENTY-TWO San Antonio automotive technicians have received certificates for satisfactorily completing a 40-hour course in "The Science and Technology of

Automatic Transmissions," sponsored by the University of Texas, Division of Extension, and the Automotive Wholesalers of Texas.

It was necessary to hold two local classes because of the critical shortage of skilled automotive technicians, it was reported. Instructors were George Burt and Mike Gholson of the university.

Certificates were presented at a banquet held by nine San Antonio members of AWOT. Francis Bowen, president of the San Antonio group, was the master of ceremonies.

Four Southerners Meet With Buick Council

FOUR Southerners who attended the fifth annual meeting of the 12-man National Buick Dealer Council in Flint, Mich., last month are:

James E. Fowler of Jackson, Miss., and William H. Terry, Sr., of Jacksonville, Fla., from Buick's Southeast region, and Curtice Norton of Tulsa, Okla., and J. V. Nance of El Paso, Texas, from the Southwest.

Louisiana IGO Unit Hears Business Expert

WILLIAM A. Rogers, industrial specialist representing the New Orleans Division of the Small Business Administration, was principal speaker at a meeting in Shreveport last month of the Northwest Louisiana Unit of the Independent Garage Owners of America.

Rogers told the garagemen how SBA assists small businesses in obtaining loans for expansion, erection of new buildings and working capital, and described "Management Aids" booklets published by the administration.

Other matters discussed included the erection of IGO emblem signs on highways and important thoroughfares. A night meeting was held at Ruesch Body Works' new building at 1820 Kings Highway. Heber E. Long is executive director.

Goodrich Will Build Largest Test Track

PLANS for the world's largest high-speed tire test track at Pecos, Texas, have been announced by The B. F. Goodrich Co.

The two-lane roadway will be nine miles in circumference and 24' wide. It will accommodate 50 test cars and trucks operating at speeds of 70 to 90 mph and could be used at speeds up to 150 mph with a smaller number of vehicles in operation, according to a company spokesman. It will have its own service facilities.

American Motors Sets Up Southern Sales Region

A FIFTH sales region in the South has been added by American Motors Corp. as part of an expansion program designed to meet increased Rambler volume sales. Roy Abernethy, vice president of automotive distribution and marketing, announced.

Headed by M. A. Saunders, formerly in charge of the Great Lakes region, the new Southern region is headquartered in Atlanta, Ga. It consists of the Atlanta, Memphis, Cincinnati and Houston zones.

Are You Getting Your Share
of FILTER SALES for . . .

Foreign Cars

THESE 6 WIX FILTERS

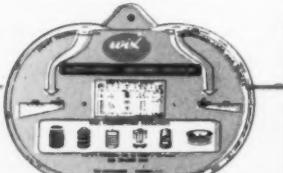
1-PC-300P	1-PC-304P
1-PC-301P	1-PC-306P
1-PC-302P	1-PC-308

SERVICE THESE 20 MAKES

Allard	MG
Aston-Martin	Metropolitan
Austin	Morgan
Austin-Healy	Morris
Daimler	Standard
Datsun	Sunbeam-Talbot
Fiat	Triumph
Ford-English	Vauxhall
Hillman	Volvo
Lancia	Wolseley

**THE FCA-6 ASSORTMENT GIVES
YOU ALL 6 FILTER CARTRIDGES**

**PLUS
THIS WINDOW POSTER
PLUS
DIAL-O-MATIC SELECTOR**



DIAL-O-MATIC instantly identifies the right Oil and Air Filter Cartridge for ALL American Cars and Light Trucks—Oil Filter Cartridges for Foreign Cars. It's a must for busy service stations.

Don't sit and wait! The answer to your Foreign Car Filter problem is here! Your customers are looking for Filter Cartridges in the WIX FCA-6 Assortment RIGHT NOW . . . not next Fall! With these genuine WIX Cartridges you can service 85% of all Foreign Cars on the road.

The FCA-6 Assortment gives you giant coverage — at midget cost! In addition to the 6 Cartridges, you get a Handsome Window Streamer PLUS the 1960 WIX Dial-O-Matic Cartridge Selector that enables you to instantly identify the right oil and air filter on ALL American Cars and Light Trucks . . . Oil Filters on ALL Foreign Cars. Get this money-making assortment from your WIX jobber TODAY!



WIX CORPORATION . . . GASTONIA, N. C.

In Canada: Wix Corporation Ltd., Toronto
In New Zealand: Wix Corporation New Zealand Ltd., Auckland

Automotive NEWS BRIEFS

(Continued from page 11)

This will acknowledge receipt of your remittance No. 9744, dated March 9, 1960, in the amount of \$ 17.04 to apply against your account, for which we thank you.

In reconciling your remittance, we noticed you deducted discount in the amount of \$.35; whereas, according to the correct amount allowed, as reported on the invoice, would be \$.33.

Taking the above into consideration, we are crediting your account for allowable discount in the amount of \$.33, leaving a balance due of \$.02.

Will you kindly notify all parties concerned regarding our discount policy, and will you please send us your remittance covering this balance; or, if you have open orders with us, include it in with your next remittance.

Please refer to the face of our invoices for the correct discount deduction which is allowed on the merchandise only.

Eliminating any identification, this is the exact text of a letter received last month by a North Carolina wholesaler from a long-time supplier of the aftermarket. It was signed by the "general accountant." Said the Tarheel jobber: "Yes, we mailed them the two cents. If it is true each letter costs an average of \$1.50, this firm will lose on too many of these deals." The wholesaler, you can be sure, also spent four cents for postage to transmit the two-cent check. His secretarial help isn't free, either, although it might appear that the manufacturer's people work for nothing and maybe he has free-postage privileges!

Luxury Car Sales Firmer, Says Chrysler Official

LUXURY car sales throughout the industry are firmer than ever despite recent public interest in compact cars, according to E. M. Braden, general sales manager of the Chrysler and Imperial Division of Chrysler Corp.

Braden told Georgia dealers in Atlanta last month that Chrysler and Imperial retail deliveries during March totaled 8,987 units, an increase of 32.8% over the 6,766 units delivered in March 1959.

"Automobiles in Imperial's and Chrysler's class are selling very well," Braden said, "and we expect a further upturn in the entire market in the remainder of April and in May and June."

"The advent of the compacts," he said, "is stirring things up and has resulted in tremendous interest in new cars in all price brackets.



Sales Manager Braden

Proof of this is the fact that automobile shows almost everywhere are breaking all-time attendance records."

Dealers today must be quick to recognize this new and different kind of automobile market, he



Probably this seven-pound largemouth came off its perch in a museum just for the photograph, but the holder here claims he caught it several weeks ago at Little Hurricane Creek on the Center Hill (Tenn.) reservoir. There's no doubt, though, that the holder is Keith Broyles of Nashville, executive secretary of the Automotive Wholesalers Association of Tennessee, who has been known to snag a varmint this size which is called a minnow by some Georgia fishermen.

said, adding that today's car shopper is more sophisticated than ever as a result of a barrage of reading material on cars and attendance at shows.

"Selling methods which have worked well in the past," Braden said, "may not necessarily work well today."

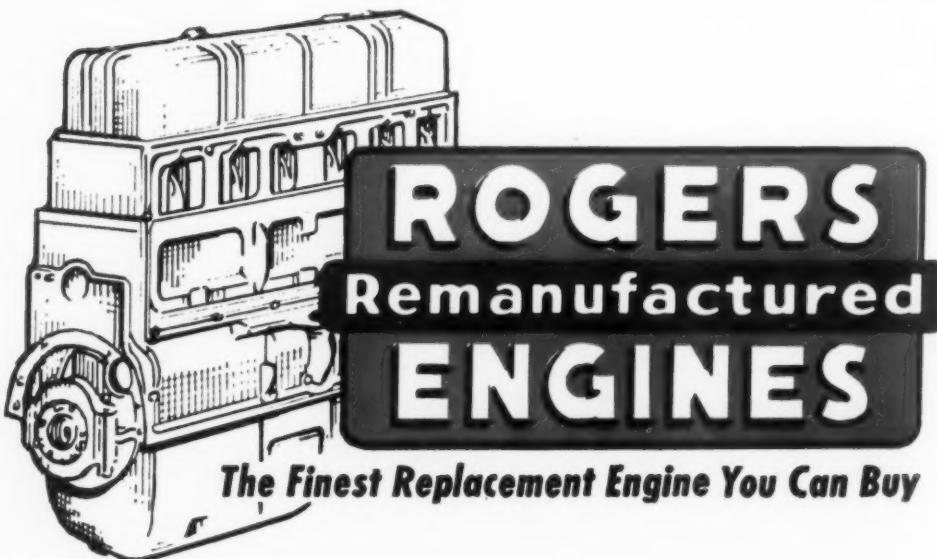
He pointed out that his division is concentrating on demonstration drives with its Imperial "because we find that there is no other method of selling which so effectively displays the superior performance and workmanship of our product."

"In one recent nationwide test, it was shown that one out of every four demonstrations has resulted in the sale of an Imperial or other Chrysler product."

North Carolina Dealer Dies

J. Melvin Jones, 63, owner and operator of Jones Chevrolet Co. in Pink Hill, N. C., died last month in Kinston. He was also co-owner of Community Chevrolet Co. of Mayesville and Belle Oil Co. of Pink Hill.

No shop job
shows profit equal
to Exchange Engine profit
- and no Exchange
Engine will equal
the genuine



Don't waste valuable time and space overhauling engines in your shop! Installation of a Rogers Remanufactured Engine is so relatively simple it can be done in a single day by one man. Best of all you are able to compete with chain store prices and still make good profits, *as much as \$125 per engine installation.*

When you install Rogers engines both you and your customer are protected 3 ways against defects in parts and workmanship. Rogers is the only remanufacturer in the industry who provides you assurance of engine

performance by dynamometer testing under full power with a complete testing record and Rogers famous written warranty.

In addition Rogers offers you complete sales help in the form of wall signs, newspaper mats and direct mail materials. Ask your Rogers distributor today for more information on exchange engine profits.

JOHN ROGERS CO.
1060 Huff Road, N.W. — Atlanta, Ga.

YOUR REPUTATION RIDES WITH THE ENGINES YOU INSTALL.

(Continued from page 13)



Officers and directors of ADAA, shown at Biloxi after their election, include (l. to r.): seated, Roland Cooper of Camden, president; Blaine Brownell of Birmingham, first vice president; J. L. Rouse, Sr., of Montgomery, second vice president; L. E. Thomas of Birmingham, third vice president; Harold E. Streetman of Monigomery, executive vice president; and Forest McConnell of Montgomery, secretary-treasurer; second row, directors M. A. Peek of Decatur, W. D. Ray of Huntsville, H. E. Ray of Haleyville, Roy Barnett of Marion and T. M. Smithweck of Mobile; third row, directors R. R. Long of Atmore, Carl Golson of Fort Deposit, J. B. Dunn of Roanoke, John Baker of Eufaula, A. C. Freeman of Dothan, W. S. Edwards, Jr., of Birmingham (NADA director for Alabama), and Charles W. Slaton of Union Springs, retiring president. Directors not shown are John Denion of Florence, Roy Drinkard of Cullman, Olan C. Hern of Albertville, Kenneth Hicks of Anniston, Jim Skinner of Ensley, Aubrey D. Green of York, Joe McCorquodale of Jackson, Thomas W. Cooley of Talladega and Judson Colley of Troy.

Dealers Are "Easy Mark," Moore Tells Alabamians

WASHINGTON looks upon car dealers as an "easy mark" due to their lack of interest shown in politics and legislation, Executive Vice President James C. Moore of the National Automobile Dealers Association asserted at Biloxi, Miss., April 25.

Addressing the 25th annual convention of the Automobile Dealers Association of Alabama, the attorney cited recently introduced legislation which would further burden the automobile industry and called for a "militant" interest in government at the local and state levels.

In a reference to preventive maintenance—always preached in this industry, Moore told the convention, which chalked up a record attendance of 400:

"Franchised new-car and truck dealers are firm believers in the 'stop the trouble before it starts' philosophy as applied to their own business, yet too many of them turn their backs on this basic tenet

when it concerns something as important as politics on all levels—local, state and national."

When exponents of opposition views are elected to office and when legislation harmful to the dealers' business existence is passed, the political vehicle is then beyond repair without expensive and radical surgery, Moore pointed out.

Nor are excuses given by businessmen for not being more active and more involved in politics too valid when analyzed, the NADA executive continued. Perhaps the most popular excuse for the businessman's political lethargy, he added, is the wornout "I don't have time" alibi.

"On the contrary," Moore emphasized, "now is the time to take time. It takes less time to stay active and alert in the political arena right along than it does to appear on the capitol steps, hat in hand, each time an unfavorable bill is under consideration. We are quick to condemn after unfavorable decisions are rendered, but we do little beforehand to practice preventive

maintenance in the interest of our industry."

Another overworked excuse for lack of political interest and activity cited by the speaker was the "we've got to sell to everyone and can't afford to take sides" dodge. It's not a matter of taking sides, Moore said, but rather a matter of standing for a set of principles and letting those principles be known.

Other speakers included Paul M. Millians, vice president of Commercial Credit Co., Baltimore, who asserted that dealers are becoming more profit-minded (see page 109); Herbert Gordon of Kaplan & Crawford (Dodge), Washington, D. C.; Del Spitzer, Spitzer Management, Inc. (owners and operators of 14 dealerships), Elyria, Ohio; Clarence N. Walker of the Coca Cola Co., Atlanta, and Bill Gove of Coral Gables, Fla.

Calvin Johnson, public relations consultant of Washington, D. C., was the banquet speaker.

A "chuck wagon" breakfast was hosted by Commercial Credit Corp. and Calvert Fire Insurance Co., with charcoal-cooked steaks and all the trimmings.

Few of the convention attendees were aware of the racial disturbance which occurred nearby on the beach.

A. C. Freeman (left), Dodge dealer at Dothan, was awarded the plaque designating him "Mr. Alabama Automobile Dealer of 1960" during the state convention. Making the presentation was Associate Justice John L. Goodwyn of the Alabama Supreme Court, chairman of the jury of awards. Freeman is a past president of ADAA and has long been active in state and county civic affairs.



New for

1960!



Kool Kooshion®

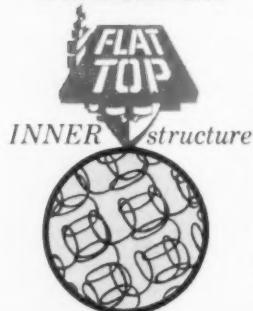
St. MORITZ

Ventilated Seat Cushions

The "St. Moritz" is a completely new ventilated seat cushion by Kool Kooshion, oldest manufacturer in the business. Sparkling full color Tweed patterns on *both sides*. Top quality, full weight, full strength fabric is completely immersed in Vinyl for greater strength, color freshness and crispness. Triple "lock-stitching" holds cushion's shape, assures longer life.

New

**Kool
Kooshion**



3 SIZES: Regular, Jumbo, Klear-A-Kross®.

**4 TWEED PATTERNS: Snow-cap white,
intermingled with Blue, Green, Black or Red**

NO SAG, NO SNAG.

*Coil inner springs are made
of a single length of wire.
Keeps ventilation space
needed for air cooling,
stays comfortably firm.*



For catalog and price list, call your jobber or write

Kool Kooshion Mfg. Co.

DYERSBURG, TENN.



Quality • **HECO** • Product

A NEW
Laher
MONEY
MAKER

SHOCK BOOSTER SPRINGS...

- Variable Dimension Suspension — miracle ride
- Ends dangerous "Rear End Drag" and car "bottoming"
- Fits most car, light truck and trailer shocks
- Up to 800 lbs. extra carrying capacity
- Boosts sagging springs — silent performance
- No troublesome rubber sleeves
- Keeps lights on road
- Easy to install

PATENT PENDING

Colorful display carton
for easier selling and merchandising



Laher Shock Booster springs are engineered and manufactured from the finest spring steel and malleable castings. They are not made from light muffler hardware which could spread and slip dangerously. Laher Shock Booster springs hold securely, grip tight and won't let you down! Satisfaction guaranteed—or your money back!

LAHER ADJUSTABLE SPRINGS



Fits all cars and light trucks with rear spring under axle. Gives up to 1500 lbs. added capacity. Can be transferred from one type car to another. Easy to install.

LAHER SNUBBER BOOSTER SPRINGS



Fastest selling helper spring in America. Fits all models and makes of cars, station wagons and fancy pickups. Adjustable—raise car as high as you want.

LAHER HOOK-LOCK OVERLOAD SPRINGS



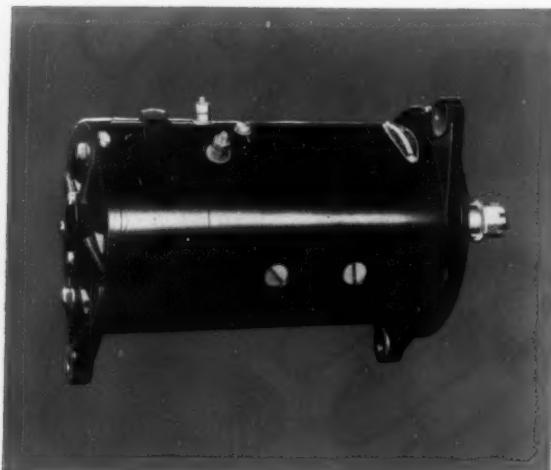
World's quickest attachable and detachable spring—attach in minutes—no special tools required. Foolproof engineering adds up to 1000 lbs. extra capacity. Perfect for pulling trailers.



LAHER SPRING & ELECTRIC CAR CORP.

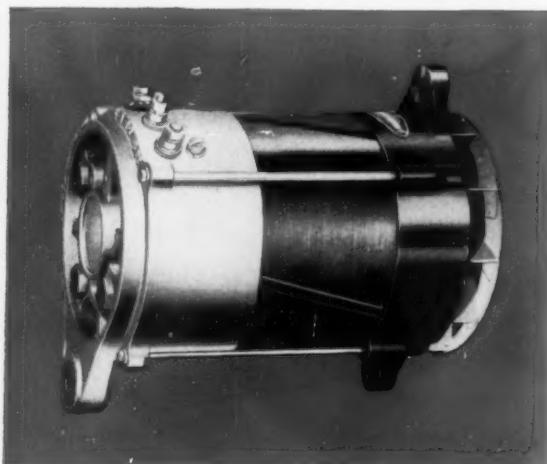
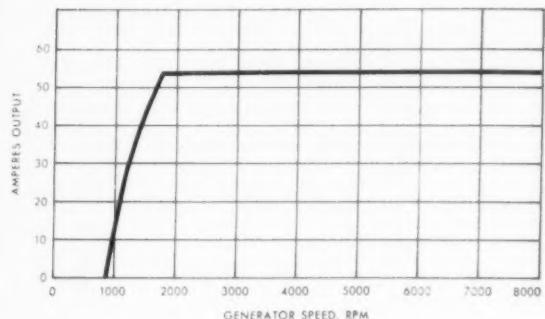
OAKLAND, 2615 Magnolia St. • MEMPHIS, 300 Madison Ave. • FORT WORTH, 910 Florence St. • LOS ANGELES, 807 E. 8th St.
PITTSBURGH, 1208 Powers Run Road or 6400 Hamilton • PORTLAND, N.W. 15th and Davis • SACRAMENTO, 1217-16th St.
SALT LAKE CITY, 541 So. State St. • SAN FRANCISCO, 98-12th St. • SPOKANE, 1319 W. 2nd Ave. • ST. LOUIS, 3041 Olive St.

TAILOR YOUR TRUCKS

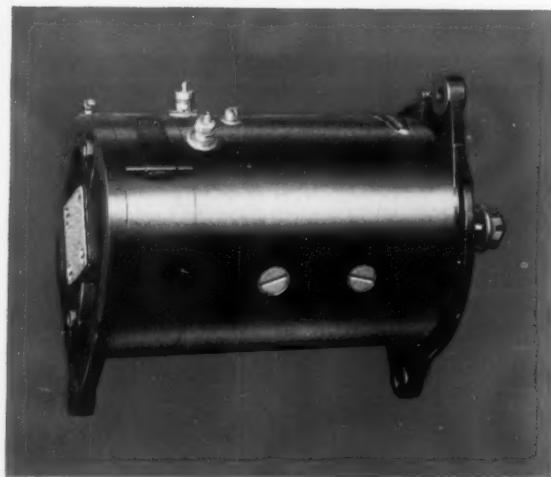
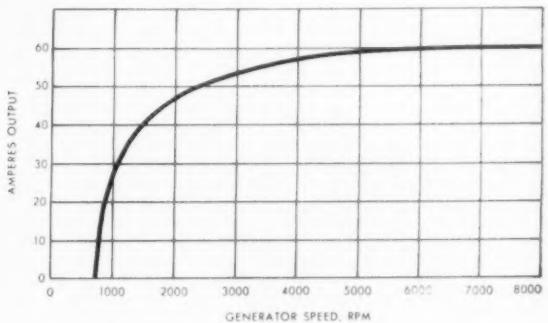


1106991 EXTRA-OUTPUT D.C. GENERATOR—12 volts

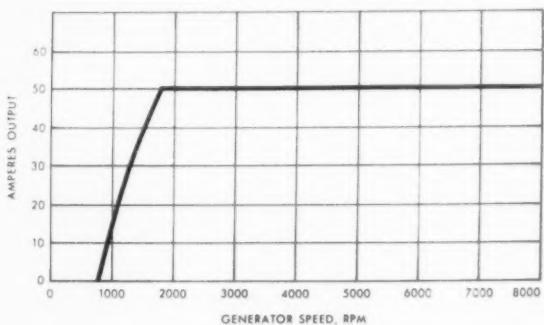
• 55 amperes • 12 amperes at idle—For cross-country trucks, school buses and other vehicles with extra electrical equipment.



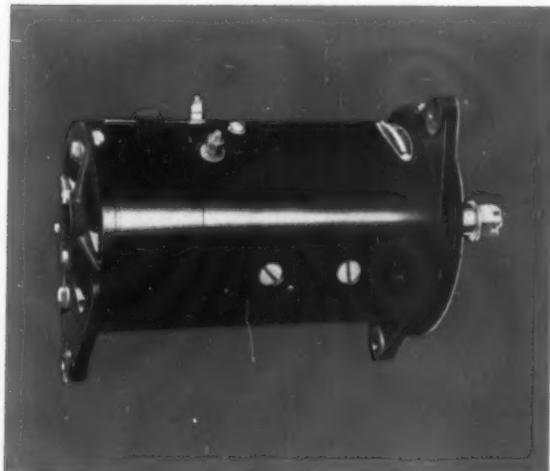
1117070 SELF-RECTIFYING A.C. GENERATOR—12 volts
• 60 amperes • 27 amperes at idle—For high-duty vehicles with heavy electrical loads . . . operating at all speed ranges. Ideal for excessive low-speed operation and curb-idling.



1106985 EXTRA-OUTPUT D.C. GENERATOR—12 volts
• 50 amperes • 14 amperes at idle—Short frame generator for difficult mounting applications. For vehicles in city and suburban use. Not for cross-country operation.

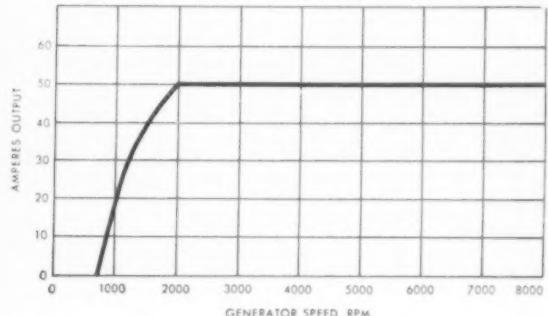


TO JOB CONDITIONS

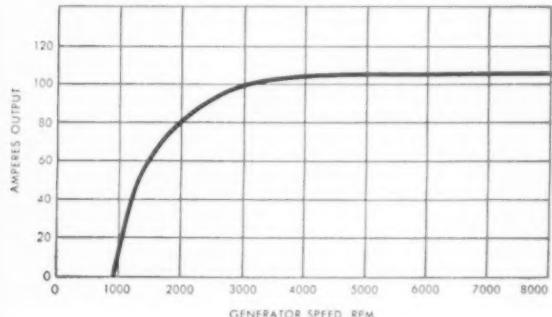


1106986 EXTRA-OUTPUT D.C. GENERATOR—12 volts

• 50 amperes • 20 amperes at idle—For metropolitan trucks and school buses, with extra electrical equipment . . . operating at low speeds and with engine idling most of the time.



1117115 SELF-RECTIFYING A.C. GENERATOR—12 volts
• 105 amperes • 10 amperes at idle—For high-duty vehicles with extra-heavy electrical loads . . . operating at all speeds. A.C. voltage available for 110 V conversion.



Delco-Remy offers a complete line of D.C. and A.C.-D.C. generators that are right for the job.

Demands on the electrical systems of trucks vary with their use. For best performance, whether the vehicles be new or already in service, the electrical equipment should be job-matched to meet those demands.

Do your trucks have extra electrical equipment? Operate cross-country, around town or off the road? Do they travel at sustained highway speeds, or with plenty of

stop and go? Whatever their assignment, there are Delco-Remy extra-output generators and regulators job-matched to meet the electric power needs exactly.

Delco-Remy ELECTRICAL SYSTEMS



FROM THE HIGHWAY TO THE STARS
DIVISION OF GENERAL MOTORS • ANDERSON, INDIANA

Capture Big "Front End" Profits with this

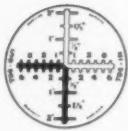
exclusive ALEMITE

BALANCING and ALIGNING PACKAGE!

Low down payment puts you in business!

**4 EXCLUSIVE
REASONS WHY
ALEMITE'S
CROSS-SIGHT
WHEEL ALIGNER
OUTPERFORMS
ALL OTHERS:**

1. Operates on measurement of one wheel in relation to the other, and depends only on the other wheel for reference.



2. Gives accurate readings even on rough or uneven floors.

3. Completely portable—no expensive installation required—no wasted space, as with pit or ramp type.

4. Sound signal tells when proper adjustment has been reached for toe-in as well as camber... eliminates need for getting out from under the car.

**4 EXCLUSIVE
REASONS WHY
THE ALEMITE
ELECTRONIC WHEEL
BALANCER
OUTPERFORMS
ALL OTHERS:**

1. Gives faster, easier balancing of all four wheels—gives true balance, both side-to-side and up and down on the car.



2. Nothing added to or removed from wheel or car. No extra attachments or adapters required—balances any wheel.



3. Sensitive vibration pickup magnetically attaches itself to brake plate or suspension arm to transmit vibration caused by out-of-balance. Simple and easy to operate.



4. All-new strobe light works indoors or out. Meter scientifically shows need for balancing and proof of perfect job. No comebacks.

For details contact your
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Parkway, Chicago 14, Ill.



ALEMITE
DIVISION
STEWART-WARNER
CORPORATION





SELLING SLANTS

MONEY-MAKING FACTS

Push Your Spark Plug Sales Sky High with

AC'S BIG CARNIVAL OF

**Eye-Catching Three-Dimensional Display
Sells Them On New Fire-Ring Spark Plugs**

Here's how you can give your sales of AC Fire-Ring Spark Plugs a boost right now and all season long. Put the exciting Carnival of Power window trim to work doing a selling job that will send your AC profits soaring! This is a sparkling, three-dimensional display that's bound to attract customer attention. Featuring the new AC Extended Shell Spark Plug, it invites every motorist to help himself to new power and economy with a brand new set of better-than-ever AC Fire-Rings. The big extra feature of this window trim is a plastic, inflatable Fire-Ring which fits around the heavy cardboard AC Spark Plug and fire trail to give the display its three-

dimensional effect. The art treatment on the words "Carnival of Power" pops out the shorter phrase "Car Power" which is what you and AC are both selling. AND THERE'S A BONUS: The Fire-Ring is actually a sturdy, vinyl Swim Tube that's certain to delight some lucky kid, once the promotion is over. Additional Fire-Ring Swim Tubes are available as traffic builders, through your regular AC supplier. Make sure you take advantage of the sales power of this outstanding display. It will help you bring to more motorists than ever the performance they get only with AC Fire-Ring Spark Plugs.

CALL YOUR REGULAR AC SUPPLIER TODAY



COLORFUL, PRACTICAL "KEYBOARD", TOO!

Here's another big plus you'll find in the AC Carnival of Power spring promotion. It's a useful and attractive "keyboard" for your customers' car keys. Made of heavy gauge metal, 15½" long by 5" high, it has ten hooks for keys. Hang it in your office or service area and you'll always know where to find the keys to any car in for service. Or, if you prefer, it will make a handy tool board for small, frequently used tools.

ALL-IN-ONE PACKAGE

It's easy to get all these sure-fire sales-building materials—the Carnival of Power window trim, the Swim Tube and the colorful keyboard. You'll receive them all in a single package for just \$1.00, with any order of AC Spark Plugs. It's the promotional bargain of the year.

New **AC** Fire-Ring Spark Plugs

OF THE MONTH !
FOR DEALERS

POWER PROMOTION !



Backed by 3-Dimensional Advertising

There'll be powerful national advertising giving three-way support to the AC Fire-Ring story this spring—strong commercials on the Art Carney TV Show; ads in *Life*, *Saturday Evening Post*, *Reader's Digest* and special interest publications; hard-selling messages on outdoor billboards in your area.

—They Must Be The Best!



SELLING SLANTS

MONEY-MAKING FACTS

Get Set To Sell More Filters

"AMAZING PERFORMANCE"

Dramatic Display Links Great Profit Team . .



This Spring, show your customers that something extra special is going on around your station. Make your location even more lively with this AC Oil Filter window display . . . and give it the bustling, gala air of a Spring Carnival. AC gives you an exciting theme for oil filter sales—"This Pair (oil and filter) Beats Four of a Kind (dirt, grit, soot and water)". This promotion combines carnival excitement with sound sales strategy for making more money out of oil filters and oil: Sell more oil filters, and you'll sell more oil. The two go together like ham and eggs—and you'll find rich profit opportunities by selling them both.

You're in for a Heart-Warming Experience!

During AC's new Spring Oil Filter promotion, you can acquire a quality gift for your home that's an outstanding value. It's a Sheridan silver-plated chafing dish to thrill your lady of the home. Whether you're serving buffet dinner or a TV snack, this chafing dish will dress up your table with useful and gracious elegance. Equipped with water jacket, handled cooking pan and alcohol burner, its versatility fits dozens of occasions. Heavily plated with silver, it has the class of a cherished heirloom.

ALL YOU HAVE TO DO! You can participate in AC's big Spring Oil Filter promotion by ordering any 36 AC Triple-Trapper Oil Filters and the Spring Promotion Package, OFM-61 from your AC representative. Include \$17.85 for the promotion package and you'll receive:

- The elegant Sheridan silver-plated chafing dish.
- The complete AC Oil Filter "Carnival" Window Trim.
- Six popular-type AC Triple-Trapper Oil Filters worth \$17.85.

When you sell the filters included in the promotion package, you'll have recovered your investment of \$17.85!

SELL ACTRIPLE-TRAPPER OIL FILTERS...

OF THE MONTH !
FOR DEALERS

and More Oil With This SPRING PROMOTION !

AMAZING PERFORMANCE
INSIDE YOUR ENGINE!



THIS PAIR

...beats four of a kind!



CHANGE YOUR FILTER WHEN YOU CHANGE OIL!

**ONLY AC GIVES
YOU THIS
COMPLETE
ADVERTISING
SUPPORT**

You can be sure that your oil filter prospects will be sold on AC Oil Filters through AC's high-frequency Spring advertising support. They'll see and hear the Triple-Trapper story in a wide variety of places: on Art Carney's nationwide television show on NBC-TV . . . in *Life*, *Saturday Evening Post* and *Reader's Digest* and in special-interest magazines. You'll find them in a buying, responsive mood toward the AC Triple-Trapper when they pull up to your station!



AC SPARK PLUG THE ELECTRONICS DIVISION OF GENERAL MOTORS

THE FINEST PROTECTION MONEY CAN BUY!

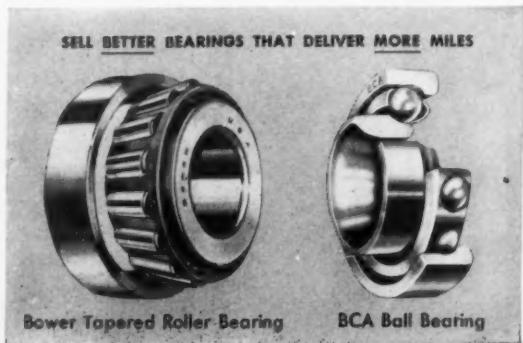
Better products, *faster*, from your Federal-Mogul jobber:



PACKAGE INCLUDES:

- Attractive steel cabinet
- Accurate torque wrench
- BCA Ball Bearings
- Bower Roller Bearings

The Bower-BCA wheel bearing package makes any gas station or garage a wheel bearing service center!



- Be equipped to service all popular cars
- Every car owner is a possible prospect
- BCA Ball Bearings and Bower Roller Bearings
- Attractive steel cabinet comes with stock
- Accurate chrome-plated torque wrench included
- Easy to read application and price card
- Restocking insures steady high-profit sales
- Check bearings whenever you pull a wheel
- Be prepared to make immediate replacement
- Window poster and decal included with stock

**ORDER THE PACKAGE TODAY
FROM YOUR FEDERAL-MOGUL SERVICE JOBBER!**

FEDERAL-MOGUL SERVICE

DIVISION OF FEDERAL-MOGUL-BOWER BEARINGS, INC. • DETROIT 13, MICHIGAN



New Du Pont Telar is the first NEVER DRAIN anti-freeze and anti-rust coolant!

Climaxing 5 years of research and car tests, Du Pont presents "Telar"—the first and only anti-freeze and anti-rust coolant that can be safely left in year after year. As long as the cooling system is functioning properly, "Telar" never needs to be drained—you merely add to it. "Telar" is full strength, *not* diluted. Just add it to any water to give the degree of protection desired.

NEVER NEEDS DRAINING

Why doesn't "Telar" anti-freeze and anti-rust coolant need draining? The corrosion inhibitors in ordinary anti-freezes gradually break down through high mileage, air suction, exhaust leaks, hot spots, etc. Then rust clogging starts unless the anti-freeze is drained. But "Telar" stands up and stays fresh where others break down.

PERFECT SUMMER COOLING

"Telar" reacts with the metal surfaces of the cooling system to form a *chemical armor* against rust and corrosion. It rust-proofs all cooling system metals—including aluminum. By keeping the car's cooling system clean and free-flowing, it maintains perfect cooling summer and winter.

CONTAINS COLOR CHECK

To guarantee peace of mind, Du Pont has added Color Check to "Telar". If anything should go wrong with the cooling system, like a faulty water pump or gasket, the solution's color changes from red to yellow to warn you *before* further trouble develops. As long as it's red, you *know* it's giving complete protection against rust and corrosion. If it turns yellow, it's a warning to drain and discard the solution and repair the cooling system. In 5 years of road tests this rarely happened.

MORE SALES, MORE PROFITS

You make \$1.65 on every gallon, and every sale builds repeat business. Because only "Telar" can be added to "Telar", the customer comes back to you to make up solution losses and resulting dilution which lessens the degree of anti-freeze protection. Because nobody wants to drain anti-freeze, all your customers are prospects for "Telar".

PATENTED FORMULA:

- Prevents freezing in winter!
- Maintains perfect cooling in summer!
- Rust-proofs all cooling system metals all year round!
- Contains Color Check which changes the solution's color if cooling system trouble contaminates it!



Introducing new "Telar"—for the protection car owners want—the profits you want!

Commands installed price of \$5.00 per gallon!

Pays premium profit on every sale!

Sold exclusively through servicing dealers!

Telar

DUPONT
REG. U.S. PAT. OFF.
BETTER THINGS FOR BETTER LIVING
...THROUGH CHEMISTRY

... made by the makers of ZEREX® and ZERONE®



499 WAYS TO FIGHT CORROSION

Zinc-plated fasteners resist rusting at reasonable cost. Clean and bright, they make your good work look even better.

Problem was, certain sizes and types were hard to come by. Now they're available, quality-manufactured by Lamson & Sessions.

Your Lamson Distributor is ready to serve you with 499 Silverline fasteners, the widest selection of types and sizes you'll find anywhere. Ask him for details. If you don't know who he is, write us direct.

SILVERLINE—widest selection of plated fasteners available anywhere. Zinc plated with chromate finish, available in standard packages.

HEX SCREWS AND BOLTS

*1038 Cap Screws
Hex and Hex
Carriage (w/nuts)
Lag

WASHERS

S. A. E. Flat
U. S. S. Wrought
Medium Lockwashers

NUTS

Hex
Machine Screw

SMALL SCREWS

Stove Bolts
(Round & Flat Head)
Tapping Screws
(Type "A"—Oval, Pan,
Hex & Round Head)



LAMSON & SESSIONS

5000 TIEDEMAN ROAD • CLEVELAND 9, OHIO

Plants in Cleveland and Kent, Ohio • Chicago and Birmingham

*"...the
most
significant
engineering
advance"
of
1960*

... Motor Trend Magazine



Corvair "CAR OF THE YEAR"

Here's one more reason '60 is a big year for Chevrolet dealers and salesmen. Motor Trend—the world's largest general automotive magazine—has bestowed its coveted Car-of-the-Year award upon Corvair. Why? The reasons given by the editors in their unanimous decision (announced in the April issue) clearly detail the selling advantages Corvair has over all other compact cars in the land. "Four-wheel independent suspension totally unlike any other U.S.-built car" . . . "air-cooled aluminum engine . . . not dependent on the properties of a liquid coolant" . . . a rear-mounted engine and transaxle "allowing a flatter floor and lower roofline . . ." Chevrolet dealers have the Car of the Year—and it's another big reason they're having a really big year! . . . Chevrolet Division of General Motors, Detroit 2, Michigan.

corvair
BY CHEVROLET



It's Here!

**It's a NEW
addition**

to



The



EIS-O-VAC Tester for POWER BRAKE CYLINDERS

Get set for high-volume profits with EIS-O-VAC... the lowest priced tester in the field! The EIS-O-VAC is versatile . . . it does everything you would expect from the most expensive unit; it tests all vacuum cylinders* — all years — including high-pressure (1800 PSI) Hydровacs!

FEATURES

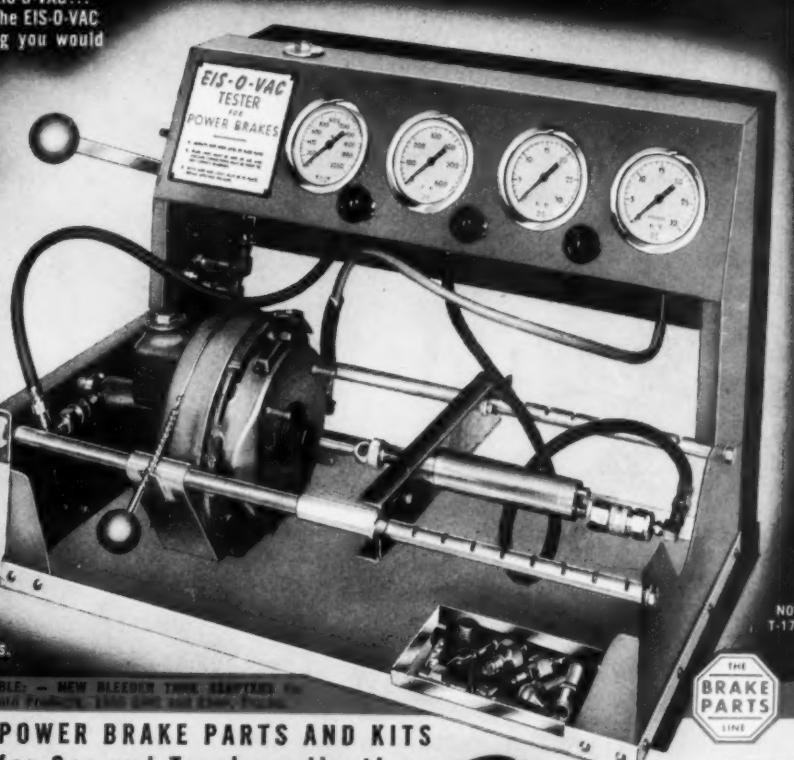
- Easy and quick method of setting up cylinders!
- All fittings and adapters furnished.
- Built-in drip pan!
- High-pressure fittings need no big wrenches for tightening — O-Rings eliminate continuous gasket replacement!
- Instruction manual and Test-Pressure Specification Guide supplied!

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VACUUM PUMP AND MOTOR — Available as optional equipment.

Write for descriptive literature

*BENDIX Treadle-Vacs,
Hydровacs, Master-Vacs,
Power-Vacs . . . All KELSEY-HAYES
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units and all MIDLAND Hy-Power Units.



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T-1700



**POWER BRAKE PARTS AND KITS
for Car and Truck applications**



EIS AUTOMOTIVE CORP., MIDDLETOWN, CONN.

Ask your EIS Distributor or write for Catalogs!

BRAKE HOSES
BRAKE TOOLS
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BRAKE CABLES
POWER BRAKE PARTS AND KITS
SUPER SAE BRAKE FLUIDS
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MASTER AND WHEEL CYLINDERS

NOW...

PHIL RIZZUTO



SETS UP SALES... SIGNS BRING 'EM IN!

Maremont featured on CBS
"SPORTS TIME" with PHIL RIZZUTO . . .

6 EVENINGS A WEEK . . . EVERY WEEK
. . . AT PEAK DRIVING HOURS . . . it's
Maremont Mufflers on "SPORTS TIME"
with PHIL RIZZUTO over the CBS radio
network. Almost daily, car-owners are being
told to look for the Maremont Sign of quality
muffler service. Be sure yours is on display!

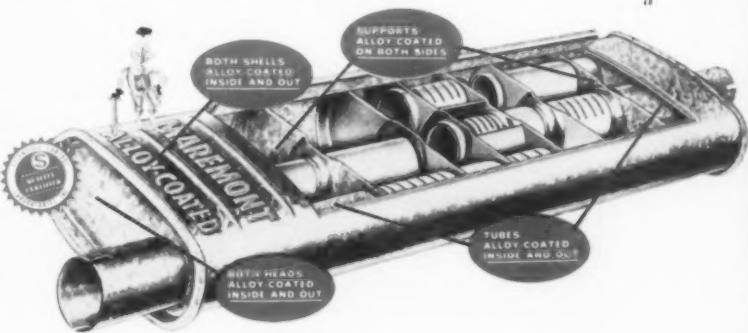
HERE'S THE SIGN THEY'LL LOOK FOR...

The Nation's No. 1 Traffic-Stopper . . . now in 3 sizes, 6 different adaptations!

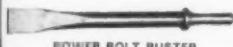
- 6½-foot tall Curb Sign (shown at right) . . . all metal in 4 handsome colors. . . . A proven sales-builder!
- NEW 39" Sign . . . all Curb Sign features . . . mounts 3 ways—with Swinging Stand for driveway, with Straps for pole, or with Brackets for wall.
- NEW 2-foot Sign . . . a compact Curb Sign replica . . . for driveway as an Island "A" Sign, or back-to-back as an Island Pole Display.



All promote Maremont—the GENUINE ALLOY-COATED MUFFLER . . . Genuine Maremont alloy-coating of aluminum, cadmium, lead and zinc effectively fights rust and corrosion best! Genuine Maremont alloy-coated Mufflers are protected *inside and out* with tubes, supports, heads and shells of special alloy-coated* steel. One genuine alloy-coated Maremont Muffler actually outlives two ordinary steel mufflers!



6 FASTEST-SELLING MUFFLERS FREE—SELL 'EM AND POCKET \$81⁴⁰
when you buy the MAREMONT-CHICAGO PNEUMATIC ZIP-GUN at standard mechanic net of \$99⁵⁰



POWER BOLT BUSTER



POWER PIPE PEELER



POWER PIPE CUTTER



CHISEL RETAINER SPRING



BEEHIVE RETAINER SPRING

Don't compromise with quality! No other power tool compares with the genuine Maremont-C/P Zip-Gun! Get full details from your Maremont Jobber today!

ALWAYS
INSTALL



ALLOY-COATED
MAREMONT MUFFLERS
the ADDED LIFE line

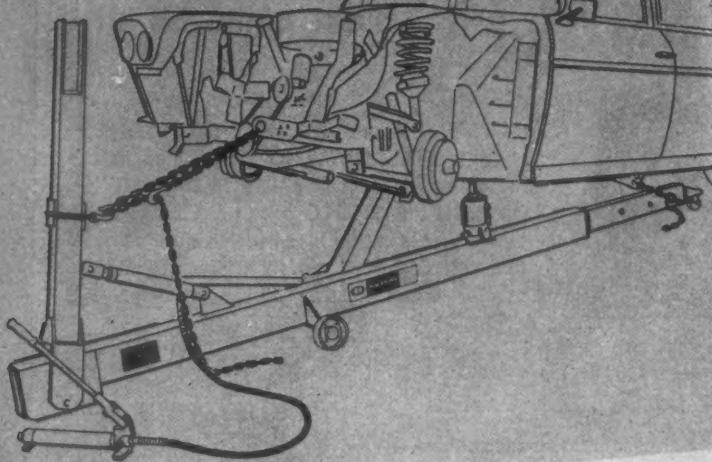
*most popular models

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PHIL RIZZUTO DIRECTS 'EM TO YOUR MAREMONT SIGN . . . BOOSTS YOUR SALES!

THE FIRST

HOW TO



Repairing the **UNITIZED BODY**

Dozens of pictures and instructions give you on-the-job "how to" procedures.

Cover these basic steps . . .

- **Unit body construction:** what it is, what makes it different, the effects of collision.
- **Steps in repair:** locating damage, planning proper technique, roughing out, checking.
- **Repairing unitized bodies with Damage-Dozer:** front, side and rear applications.
- **Corvair repair techniques:** methods and tools.

PUBLISHED BY
BLACKHAWK
AUTOMOTIVE DIVISION
MILWAUKEE 46, WISCONSIN



Portable **Damage-Dozer** equips your shop
for all unitized body repair work

One tool — the Damage-Dozer — sets you up for money-making jobs you may now be missing because of limited equipment . . . solves countless repair and frame-straightening jobs whether unitized or conventional construction, and keeps your bids competitive. Your Porto-Power jobber can arrange a demonstration and show you details of Blackhawk's pay-as-you-earn profit plan.



STEP-BY-STEP PICTURE INSTRUCTION BOOK ON...

REPAIR UNITIZED BODIES

FRONT-END DAMAGE



SIDE DAMAGE



REAR-END DAMAGE



MAILED TO EVERY BODY SHOP
IN THE COUNTRY

This valuable new 20-page book tells you how to use your sheet metal skills to repair unitized cars

Out goes the mystery—easy picture steps show you the "how-and-why" of unitized body repair

. . . and another first for you from Blackhawk, a solid and practical photo-guide to keep you posted on professional methods that make the most of your time and skill on the job.

Keep your eye nailed to the mail for this, first of its kind ever published. It's on the way now . . . yours from Blackhawk to help you beat competition on any bid on unitized body repair.

And so simple — the pictures tell the story: the portable Damage-Dozer takes the burden from your back and the extra time out of cost estimates. Here's how:

Damage-Dozer gives 10 tons of controlled hydraulic pressure. You can pull light sheet metal and reinforced sections into proper place at the same time.

It's fully adjustable in length and height . . . works in any position, pulls from every angle.

Damage-Dozer rolls to the job on wheels — no skidding into position — keeps its "feet" for quick-time operation on the job. Compact, too. Only takes up 2' x 12' of storage space — you can get into the business without tying up two stalls plus a heavy-equipment investment.

Want more facts? See your Blackhawk Porto-Power jobber for complete details — and remember, more Blackhawk photo-guides on other styles of unitized car construction are in preparation now.



BLACKHAWK

AUTOMOTIVE DIVISION

Dept. P-450, Milwaukee 46, Wisconsin

NOW- A SPECIAL PUROLATOR



This \$17.50 Schick Ladies Crown Jewel costs you nothing when you buy the new Purolator air filter Bonanza. The shaver comes packed right in the Bonanza carton.

AIR FILTER BONANZA

This time—a wonderful gift from you
to the ladies—the beautiful new, \$17⁵⁰

Schick Ladies Crown Jewel Shaver!

HERE's the air filter Bonanza you asked for! An exciting offer that will undoubtedly match the success of Purolator's year-opening oil filter Bonanza in which the nation's dealers received thousands of Schick 3-speed Shavers. This time the offer is the beautiful, practical Schick Ladies Crown Jewel Shaver—a gift that's sure to get a big welcome at home.

Here's all you do to get
this \$17.50 Schick Shaver
at no extra cost!

- Buy the \$41.14 Purolator Air Filter Bonanza refill assortment of 15 fast-moving air filters
- Included right in the same package is the Schick Ladies Shaver

How to sell more Purolator air filters this summer!

Just remind your customers how a clean air filter increases gasoline mileage . . . gives a car more pep and power. That's what we'll be doing 13 times every weekend on NBC's MONITOR RADIO from July 2 through the Fall to a total audience of 17 millions every weekend.

Order now from your Purolator supplier... supply is limited!

"Purolator" Reg. U. S. Pat. Off.



The Standard Equipment Line

PUROLATOR
OIL, AIR & FUEL FILTERS

PUROLATOR PRODUCTS INC., Rahway, N. J.; Toronto, Ontario, Canada

SELECTIVE SALES PLAN

**greatest opportunity for
repeat sales in the industry**

ADVERTISING ALLOWANCE

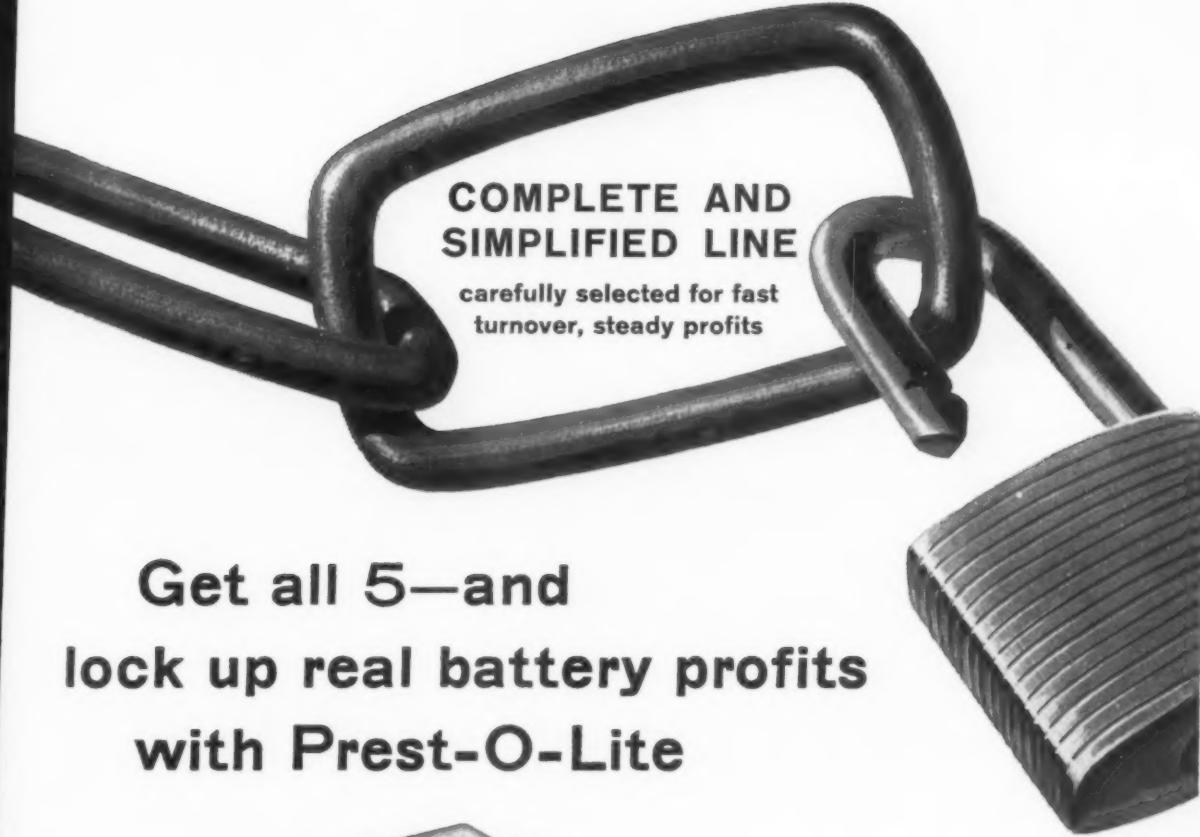
**cooperative advertising
for your own
marketing area**

CAR-OWNER ACCEPTANCE

**Prest-O-Lite has been
a going item for
over 40 years**

NATIONWIDE SERVICE

**warranties honored
anywhere regardless
of point-of-purchase**



**COMPLETE AND
SIMPLIFIED LINE**

carefully selected for fast
turnover, steady profits

**Get all 5—and
lock up real battery profits
with Prest-O-Lite**



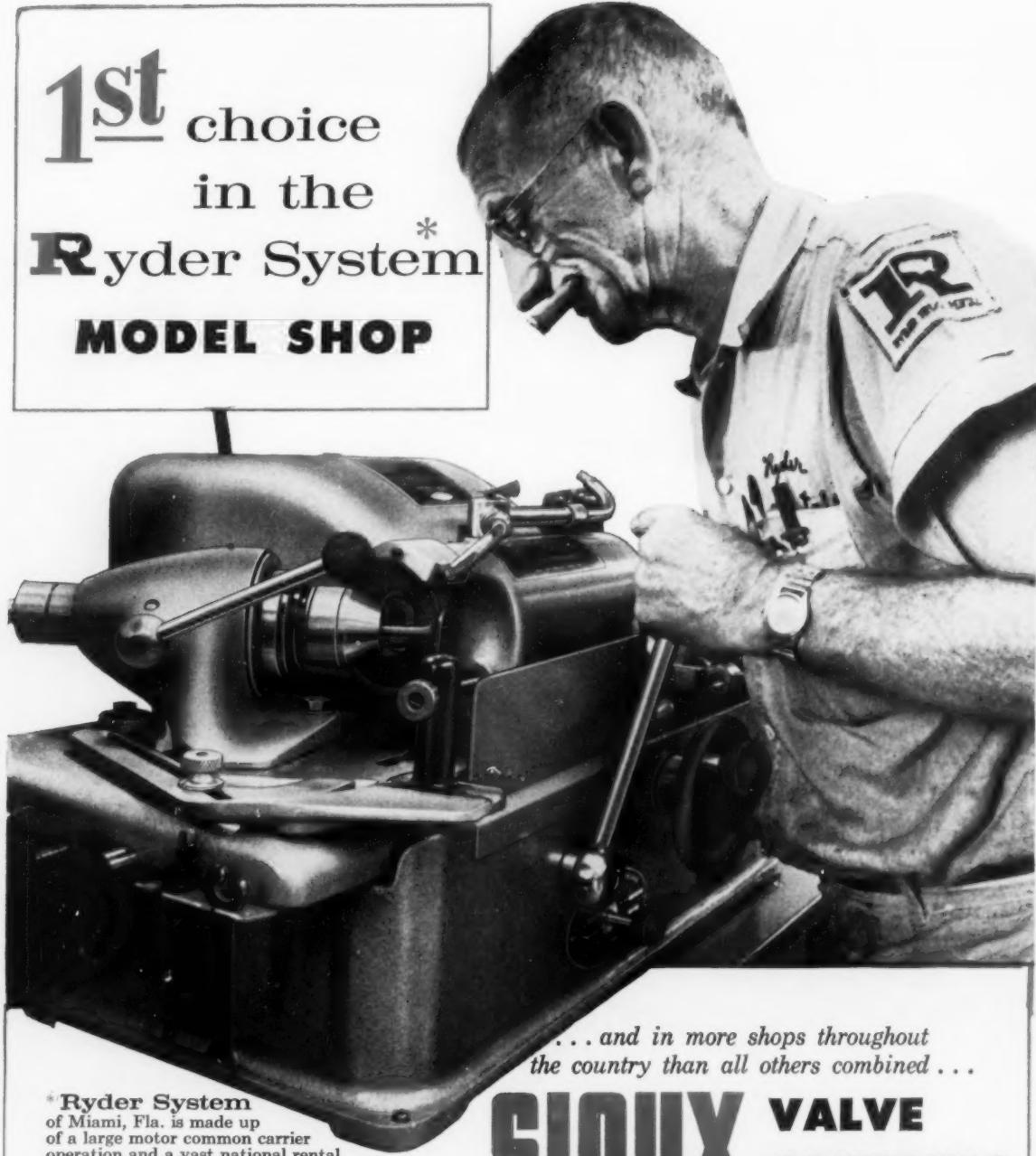
Check into your battery profits.
If they can't measure up, investigate
Prest-O-Lite. Prest-O-Lite has the
chain of features that adds up to
a custom-made battery selling plan.

CALL, WRITE OR WIRE TODAY

**Prest-o-lite®
WET OR DRY CHARGED BATTERIES**

PREST-O-LITE DIVISION, The Electric Autolite Company, Toledo 1, Ohio

1st choice
in the
Ryder System*
MODEL SHOP



... and in more shops throughout
the country than all others combined . . .

*Ryder System of Miami, Fla. is made up of a large motor common carrier operation and a vast national rental and leasing network. It owns close to 25,000 vehicles. The Miami Model Shop is the first experimental model shop of its kind in the country. It is designed and engineered to test new equipment and techniques to achieve maximum results with a minimum of lost motion.

SIOUX VALVE GRINDING EQUIPMENT

"Choose with Confidence!"

Look for SIOUX in the yellow pages under "Tools, Electric" or write to

ALBERTSON & CO., INC.

SIOUX CITY, IOWA, U.S.A.

Air Impact Wrenches • Air Screwdrivers • Electric Impact Wrenches • Drills • Screwdrivers • Grinders
• Sanders • Polishers • Flexible Shafts • Portable Saws • Valve Grinding Machines • Abrasive Discs.



Produces NATURAL High Gloss

*...when used with BOTH
Lacquer or Acrylic Colors*



Use only ONE thinner...

PNT-90 SPRAYS FREE, WET and EASY
to reduce polishing time to a minimum.
Cuts costs. Cuts inventory.

ACRYLIC COLORS, reduced with
PNT-90, produce the same high
gloss and outstanding durability
of all original factory finishes.



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WOLVERINE FINISHES CORPORATION
Morganton, N. C. ★ Grand Rapids, Michigan

You protect lives when you

**SAFE BRAKES
PROTECT LIVES!**



For Safety's sake
Wagner®
Lockheed
standardize
on
the Quality line
of BRAKE SERVICE PRODUCTS



ONE CALL GETS ALL
your brake service needs from
one source—your Distributor
of Wagner Products.

LOCKHEED BRAKE PARTS, FLUID, BRAKE LINING and LINED BRAKE SHOES • AIR HONKS • AIR BRAKES • TACHOGRAPH



Wagner® Lockheed
Heavy Duty Brake Fluid
surpasses SAE specification 70R1



Wagner® Lockheed
SUPER Heavy Duty Brake Fluid
is the very finest on the market

use Wagner® Lockheed the top quality **BRAKE FLUID**

there's none safer . . . none better

Your customers' safety . . . even their lives can depend upon your choice of the brake fluid you supply . . . That's why it is so important that you use only a top-quality, *safe* brake fluid such as Wagner Lockheed.

Wagner Lockheed Brake Fluid is *made by Wagner*—the world's largest manufacturer of brake fluid. And, this superior quality product is the world's largest selling brand. It is compounded of the finest ingredients—*chemically balanced* to function efficiently under all driving conditions—in all seasons.

WAGNER LOCKHEED Super HEAVY DUTY BRAKE FLUID is the very finest on the market. It surpasses S.A.E. specifications 70R1 and 70R3, meets State laws, and conforms to Federal specifications . . . Recommended for use on all heavy-duty trucks, also for modern high-horsepower passenger cars.

WAGNER LOCKHEED HEAVY DUTY BRAKE FLUID surpasses S.A.E. specification 70R1, meets State laws, and also conforms to Federal specifications . . . It definitely is a heavy-duty fluid—yet is moderately priced. Performance proves it to be the best fluid in its price range.

There's a supplier of Wagner Products near you. Look to him for Wagner Lockheed Brake Fluid, Brake Parts, Power Brake Repair Kits, Brake Lining and Lined Shoe Sets.

FOR DETAILS, consult your Distributor of Wagner Products, or use coupon for FREE copy of Catalog AU-1 . . . Also ask about how easily you can qualify to become a Wagner Franchised Dealer—and enjoy special benefits.

FOR SAFETY'S SAKE...check the Brake System!

This is National Vehicle Safety Check Month . . . Do *your* part. Every time you put a car up on a lift, ask the owner to let you pull a wheel . . . check the brake system.

Don't guess. Be *sure* that the braking system—parts, fluid and lining—are in safe operating condition. You'll help save lives . . . and build profitable business, too.



ELECTRIC MOTORS • TRANSFORMERS • INDUSTRIAL BRAKES

Wagner Electric Corporation
6362 Plymouth Ave., St. Louis 33, Mo., U.S.A.

Please send:

- FREE copy of Catalog AU-1
 Details on Franchised Dealer Program

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FIRM NAME _____

ADDRESS _____

CITY & STATE _____

WF60-4

**This Important Addition to the Famous
EATON LINE means more profit for You!**



**The
EATON THERMOSTAT**

**Fills Out the Eaton Line of Fast-Moving
Products that Tie-in with Under-hood Service**

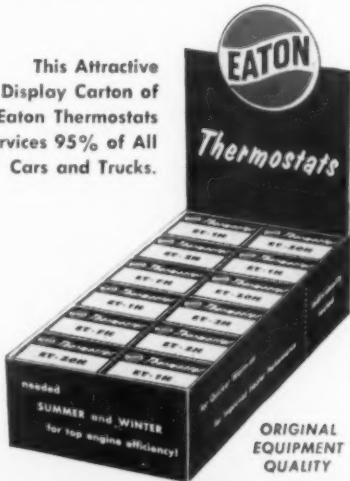
The newly announced Eaton Thermostat fits right in with today's greater-than-ever need to keep cooling systems working at top efficiency—and adds new opportunities to turn "Free Service" into worthwhile profit.

In addition to thermostats, the Eaton line includes famous Eaton radiator pressure caps (3 cars out of every 8 need new ones), fuel tank caps, locking caps, breather caps, and sales-making pressure cap and thermostat testers. For complete information contact your jobber or write direct.

EATON MANUFACTURING COMPANY

Stamping Division • Cleveland 10, Ohio

This Attractive
Display Carton of
12 Eaton Thermostats
Services 95% of All
Cars and Trucks.



Pressure Caps



Gas Tank Caps



Locking Caps



Breather Caps

Get complete information about these EATON money makers



SARAN

all
aboard!

for one of these
fabulous

SARAN

"Live Like a Millionaire"
vacations!

How would you like a winter cruise through the Caribbean, *and* a summer vacation in Canada . . . or an all-expense-paid vacation trip to London, Paris, or Rome? These are your first prize choices in the 1960 SARAN seat cover "Live Like a Millionaire" contest!

Other prizes, too! A calypso holiday in Nassau or Jamaica . . . an all-expense-paid vacation in New York or San Francisco . . . or win your choice of over 1,400 nationally advertised prizes from the big SARAN "Live Like a Millionaire" prize book.

It's easy to win! All you do is sell top-profit SARAN seat covers (that's easy enough, isn't it?) . . . then complete a simple limerick. The more SARAN seat covers you sell, the more opportunities you have to win.

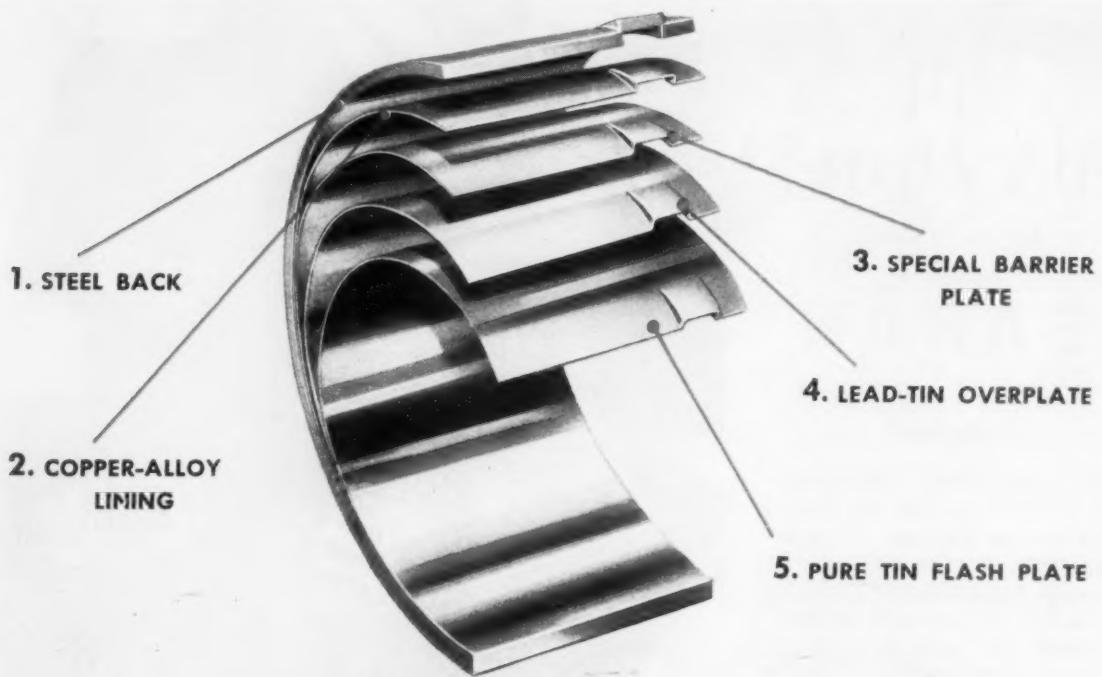
So get busy! Sell SARAN, America's favorite seat cover fabric . . . the seat covers that won't sag, soil or fade—even after years of use . . . the bright, easy-cleaning seat covers with the proved quality. And ask your seat cover supplier for details of how you can participate in the SARAN contest!

See "The Dow Hour of Great Mysteries" on NBC-TV



THE DOW CHEMICAL COMPANY • MIDLAND, MICHIGAN

Better products, faster, from your Federal-Mogul jobber:



Federal-Mogul builds CP bearings in 5 layers ... each vital to extra-long service life



Your customers expect—and get—thousands of extra miles when you install Fm bearings. Here's why:

Manufacturing Federal-Mogul CP-type sintered bearings is an exacting process. In the bearing layer, for example, there are thousands of super-fine copper-lead alloy particles, and each one must have an unvarying composition ratio. The finished bearing itself is machined and plated to close tolerances.

These five metallic layers give you longer bearing life: 1. Steel back for strength and bond; 2. Copper-lead sintered lining; 3. Special barrier plate for lining stability; 4. Lead-tin overplate for smoother "break-in"; 5. Pure tin plating for corrosion resistance.

Precision-engineered Fm engine bearings are made in thousands of types and sizes, standard and undersized. Your Federal-Mogul jobber can give you fast delivery on the bearings you need. Call him today!

FEDERAL-MOGUL ENGINE BEARINGS

FEDERAL-MOGUL SERVICE
DIVISION OF FEDERAL-MOGUL-BOWER BEARINGS, INC. • DETROIT 13, MICHIGAN



Assuring a Shop's Profit

Six steps we took to whip overhead

By **CHARLES KURTZ**

President, Midtown Motors, Inc.
Washington, D. C.

How profitable an automotive repair operation can be these days depends on the combination of a number of factors. It demands full-time alertness if income is to continue to exceed overhead.

You and I know of one-man operations in general automotive repair that have folded up, with the operator going into the salaried employ of a gas station or dealership and declaring with conviction:

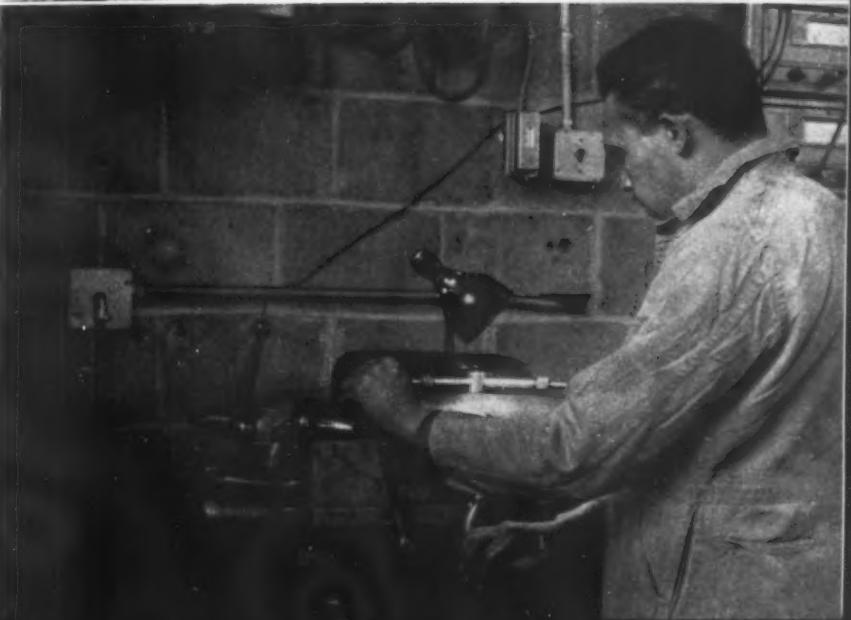
"You can't make it these days; there's no profit in a one-man garage."

National figures show that a bay in a shop should gross \$10,800 a year, according to the trade

Top: Removing an "automatic" with a hydraulic jack takes only one man, no lifting involved, and frees bay for other work after car is moved onto the parking lot.

Center: Placing the parts-washing machine centrally in the shop saves steps and cleaning fluid.

Right: It proved more profitable to invest in a valve-grinding machine than to sublet these jobs—and volume in this work increased with the machine on hand.



Radio and newspaper promotion helped build up the shop's volume.

journals. Our five bays beat that, each bringing approximately \$25,000 a year. Total labor and parts volume from our five bays brought \$125,000 for the period of December '58 to November '59. The month of December '59 closed with a 25% gain over December '58.

We're a small shop of 5,400 square feet, with four mechanics operating in five bays. Now, how did we come out ahead?

I said above that it took a com-

bination of factors to beat rising overhead. Let me enumerate them and then fill out with detail:

A garage operator must learn to delegate duties to avoid shouldering the entire load of the shop, office, customer contact, selling, collections, etc., on himself. Let someone else take over the office duties and paperwork.

As service manager or shop foreman, I believe he should be the chief troubleshooter or

trouble analyst for the shop men.

A small, compact shop must use its space and equipment productively, and keep its labor occupied productively to a maximum.

Shop layout with a view to time and labor savings must be planned for maximum production.

Control of repair jobs, control of parts, parts buying efficiency are vital.

A good promotion program will bring plus volume that will supplement the word-of-mouth promotion his satisfied customers give him among their friends.

Now let me tell you how we do it:

My working partner, Paul Flax, handles the office, all paperwork, sells TBA in the showroom and plans promotion; I am service manager and shop foreman.

In my contact with the customer as he pulls into our driveway, I listen very attentively to his car complaints and try drawing him out with questions as he relates symptoms.

The more information I can get out of him, the closer I shall be to the heart of his car troubles. It will save me incalculable time in the shop locating and diagnosing his car defects. Once I have pinpointed the trouble, the mechanic best qualified for that type of repair is assigned the job.

When he has completed his repairs, I check the car thoroughly against the repair order as well as its performance in accordance with customer complaint. My

(Continued on page 98)

Questioning a customer closely on the behavior of his car saves diagnosis time, the author (right) learned.

A well-illuminated shop with a door on each bay has eliminated time otherwise lost in maneuvering cars.



We Turned \$\$ into \$\$



A lot of changes were made by the author (shown here) to put this dealership well into the black.



New equipment, including hydraulic jacks, proved a fine investment as fleet business was also obtained.

MOST dealers will have no difficulty recalling the bleak outlook the automobile industry presented profitwise in '57 and early '58. After 31 years in the automobile business, Mr. Rickard had reached the point of debating whether to close the doors and get out of the automobile business.

In peak years the operation had averaged 250 new-car and 400 used-car sales, and service had grossed \$85,000, parts \$57,000. But in '57 parts loss stood at \$4,200, net loss at \$2,000.

Confronted with the urgency of making a decision, Mr. Rickard called in a consultant with comprehensive experience in all phases of the automobile business to analyze the operation, and take drastic steps to put it back on its feet. The results following immediate action can best be described in figures:

	First 11 months '57	of '59
Total new-car sales	264	340
Total used-car sales	405	353
Total service sales	\$94,500	\$121,000
Total parts sales	\$65,500	\$ 88,659

Net profit for the first 11 months of '59 was \$23,221. Moreover, we had achieved an average monthly

By MARION R. CLOUD

General Manager,
Rickard and Davis
(De Soto-Plymouth)
Washington, D. C.

overhead service and parts absorption of 95%!

What had happened? How was this accomplished in a small dealership despite an ailing national economy? What emergency measures were promptly taken to hold the organization?

In the first 30 days during an analysis of expenses, a temporary washout system for new- and used-car sales was set up to permit a close study of sales and profits. Our prime concerns were expenses in running the service and parts departments, the new- and used-car sales departments, and administrative expense. Our aim was to set up rigid controls governing money coming in and money going out.

There were indications of poor management in the service department. There were either give-aways in service or repairs not adequately and properly charged. We therefore replaced the service manager, and also relieved two

mechanics on new-car service and used-car reconditioning working on straight salary.

Convinced that only topnotch labor with a high degree of efficiency could revitalize a declining operation, we sought and were fortunate in bringing in an outstanding service manager with 14 years of experience.

Commanding a following of his own among commercial fleet accounts, he concentrated on those with good credit standing and succeeded in expanding our service volume. To meet this new type of business that we had always shied away from, it was necessary to replace shop equipment with more modern hydraulic jacks, special tools and equipment and lubrication equipment. Though we had to employ runners to obtain parts of competitive auto makes, and add an extra man to the parts department, profitable volume through this new-found approach began growing steadily.

In April '59 we hired an assistant to the service manager, a man who had his own body shop for ten years with his own clientele, a metal man whose persuasiveness convinced us that expanding into

(Continued on page 82)

Servicing Air Conditioning

THE increasing demand for all-year car comfort offers the repair shop an additional source of revenue through air-conditioner service.

The special tools and equipment required to render this service are not as expensive as those required for some other special car services. However, the tools and certain knowledge of how the air-conditioning system operates is necessary (Fig. 1).

Let's look at the basic air-conditioning system (Fig. 2) and then take up some troubleshooting.

An air-conditioning system consists of an evaporator, an expansion valve, a compressor and a condenser. In an automotive system, the evaporator is exposed to air flow from the passenger compartment. The expansion valve releases liquid refrigerant into the evaporator coils, the heat from the air is absorbed by the boiling refrigerant and disappears in the refrigerant vapor.

The refrigerant vapor containing the hidden heat is pumped out of the evaporator by a compressor and forced under high pressure to the condenser, which is situated outside the passenger compartment.

By E. M. LOWERY

Technical Editor



In the condenser the refrigerant vapor condenses back to liquid and the heat that was absorbed from the passenger compartment and hidden in the vapor now reappears and passes off into the outside air stream.

The liquid refrigerant under high pressure now passes from the condenser to a receiver, where it is stored for re-use. The liquid refrigerant will not boil while it is

stored in the receiver, because it is under high pressure which maintains the boiling point of the refrigerant above the temperature of the surrounding air. Thus, no heat can transfer from the outside air to the refrigerant in the receiver.

The receiver is connected to the expansion valve in the evaporator, where the cooling cycle starts over again. When the expansion valve is opened, the high-pressure liquid refrigerant from the receiver passes through an orifice in the expansion valve which releases the refrigerant into the evaporator at a greatly reduced pressure. Thus, the temperature at which the liquid refrigerant will boil is reduced below car air temperature. Now the liquid refrigerant, by absorbing heat from the car air, begins to vaporize.

It may seem difficult to understand how heat can be transferred from a comparatively cooler car passenger compartment to the hot outside air. The answer lies in the difference between the refrigerant pressure that exists in the evaporator and the pressure that exists in the condenser.

In the evaporator the expansion valve reduces the pressure and thereby reduces the boiling point below the temperature of the passenger compartment. Thus, heat transfers from the passenger compartment to the boiling refrigerant.

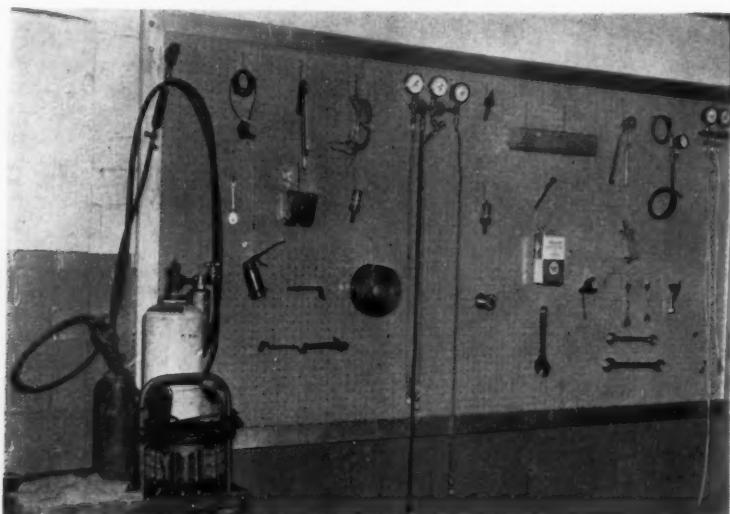
In the condenser the compressor raises the condensation point above the temperature of the outside air. So, the heat transfers from the condensing refrigerant to the outside air. The expansion valve and the compressor simply create pressure conditions that permit the laws of nature to function.

The air conditioner uses a receiver and expansion valve, an evaporator, a compressor and a condenser. Besides these major cooling components there is a liquid sight glass, an oil separator (integral with most compressors), a cooling unit thermostatic switch and a blower assembly.

Receiver unit (Fig. 3):

The air cooling system stores the liquid freon-12 under pressure in a combination receiver and dehydrator. The pressure in the re-

Fig. 1—Essential tools for servicing the air conditioner include a supply of freon-12, a leak-test torch, a vacuum pump, a manifold gauge set, a thermometer, a psychrometer, an inch-pound torque wrench and various size wrenches, flaring tools, etc.



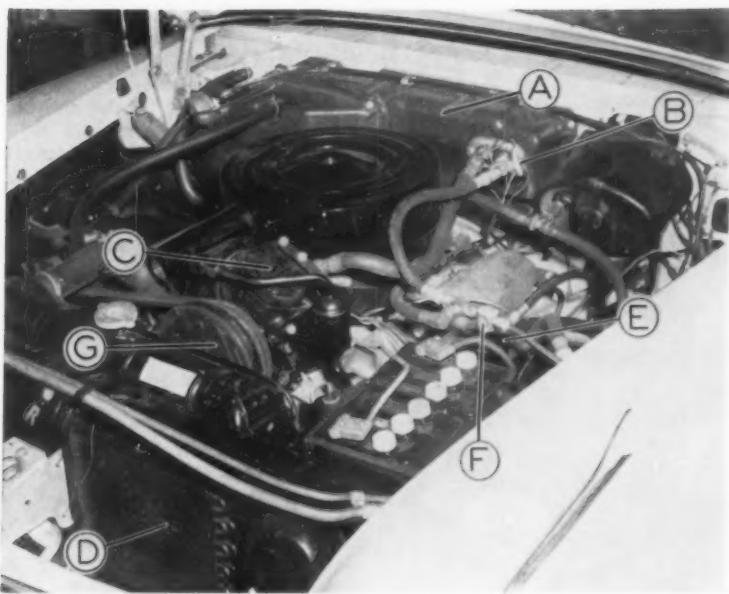


Fig. 2—Typical location of various units: A—evaporator, mounted behind housing inside car; B—expansion valve; C—compressor; D—condenser; E—receiver unit; F—sight glass; G—magnetic clutch.

ceiver normally varies from about 100 to 250psi, dependent on the surrounding air temperature and compressor speed.

The dehydrator removes any traces of moisture that may have accumulated in the system. Even small amounts of moisture will cause an air cooling unit to malfunction. A fusible plug is screwed into the receiver. This will release the refrigerant before the re-

frigerant temperature exceeds 231° F.

Evaporator unit:

When the cooling system is in operation, the liquid freon-12 flows from the combination receiver and dehydrator unit through a flexible hose to the evaporator (cooling unit), where it is allowed to evaporate at a reduced pressure.

Expansion valve (Fig. 4):

The rate of refrigerant evaporation is controlled by an expansion valve which allows only enough

refrigerant to flow into the evaporator to keep the evaporator operating efficiently, depending on its heat load.

The expansion valve consists of the valve and a temperature sensing capillary tube and bulb. The bulb is clamped to the outlet pipe of the evaporator. Thus, the operation of the valve is controlled by the temperature of the evaporated liquid at the point where it leaves the evaporator or cooling unit.

The restricting effect of the expansion valve at the evaporator causes a low pressure on the low pressure side of the system of 12 to 25psi, depending on the surrounding air temperature and compressor speed.

Liquid sight glass:

A liquid sight glass is mounted in the high-pressure refrigerant line at the receiver outlet connection (F in Fig. 2). The sight glass is used to check whether or not there is enough liquid refrigerant in the system. At no time should bubbles be seen in the sight glass while the compressor is pumping freon-12.

Compressor unit:

The evaporated refrigerant leaving the evaporator (now in the form of a gas) at a pressure of 12 to 25psi is pumped by the compressor, situated on the engine (C in Fig. 2), into the top of the condenser (D in Fig. 2), situated in front of the radiator.

The compressor maintains a pressure on its high-pressure side of 100 to 250psi, depending on the surrounding air temperature and compressor speed.

As the now heated and com-

Fig. 3—Receiver.

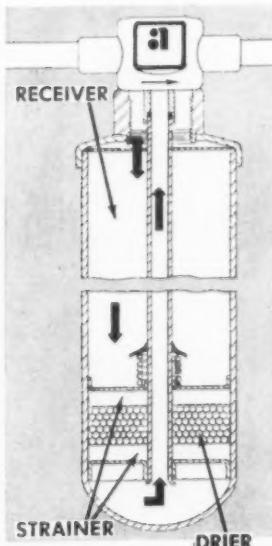
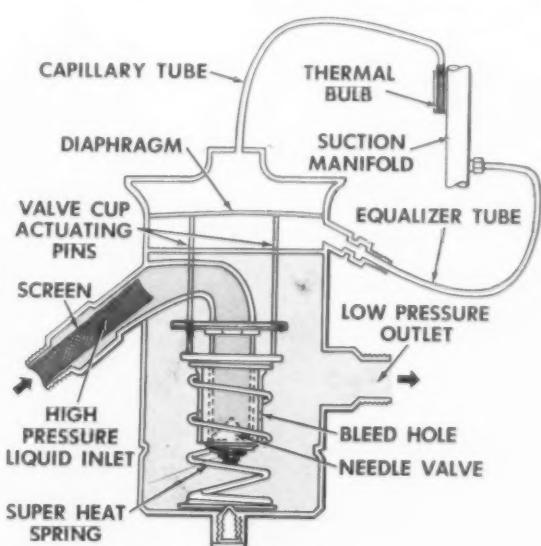


Fig. 4—Expansion valve (schematic).



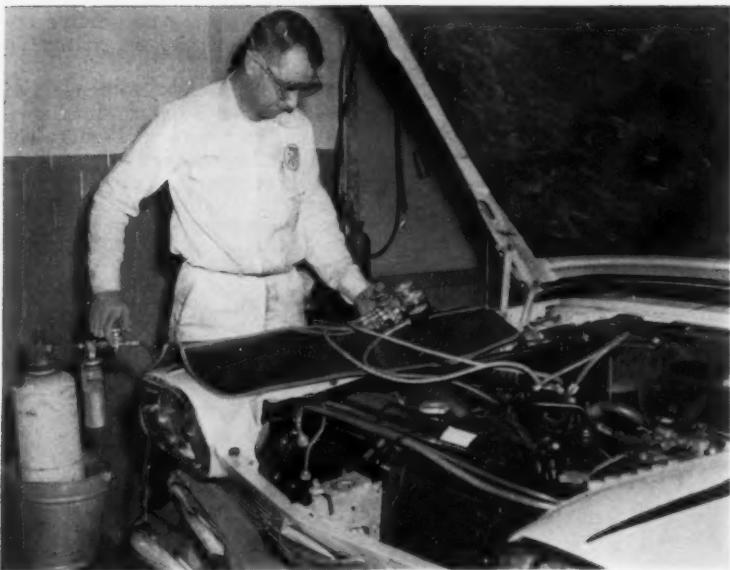


Fig. 5—Always wear eye protector when working with freon-12.

pressed gas flows down through the condenser, it is cooled by air passing between the sections of the condenser, and the cooled, compressed refrigerant gas condenses to liquid refrigerant, which then flows into the receiver.

Magnetic clutch:

It is necessary to control the amount of cooling that the system produces. To accomplish this, the compressor is cut in and out of operation by a magnetic clutch pulley mounted on the compressor crankshaft (G in Fig. 2). The clutch is controlled by a thermostatic switch which has its temperature sensing tube inserted in the fins of the evaporator core.

Thermostatic switch:

The thermostatic switch controls the operation of the compressor by controlling the compressor magnetic clutch. The temperature sensing tube of the switch is placed in contact with the evaporator fins. When the temperature of the evaporator becomes too cold, the thermostatic switch opens the magnetic clutch electrical circuit, disconnecting the compressor from the engine.

When the temperature of the evaporator rises to the upper limit at which the thermostatic switch is set, the thermostatic switch closes and energizes the magnetic clutch. This connects the compressor to the engine and cooling action begins again.

When the ignition switch is off, or the cooling control thermostatic

switch is in the off position, the magnetic clutch is not energized, and the cooling system cannot operate.

When the ignition switch is on (engine running) and the cooling control is in the cooling range, the magnetic clutch is energized, the compressor is connected to the engine and the cooling system is in operation.

The thermostatic switch controls the compressor and may be adjusted to maintain an average evaporator temperature of 30° to

60° F. The thermostatic switch operating differential temperature at any one setting is 6° F. The switch is controlled by the cooling control switch.

Safety precautions when using freon-12 (Fig. 5):

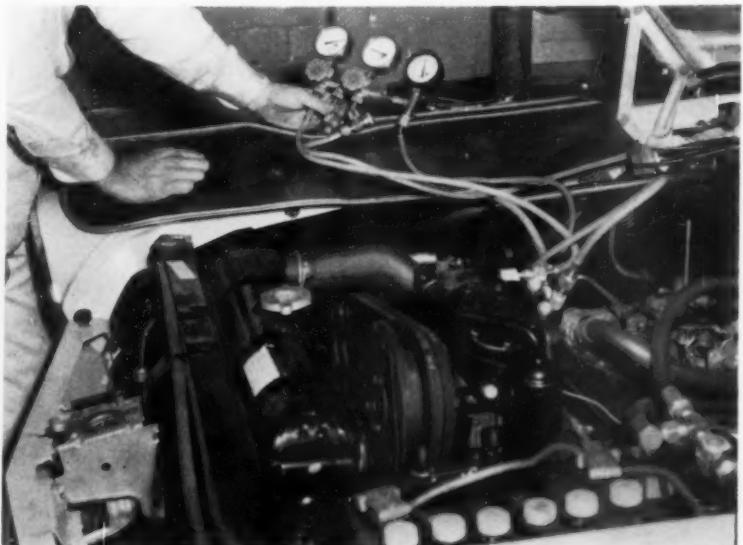
The refrigerant used in most car air-conditioning systems is freon-12. It is non-explosive, non-inflammable, non-corrosive and has practically no odor and is heavier than air. Although it is a safe refrigerant, certain precautions must be observed to protect the parts involved and the person who is working on the unit.

Liquid freon-12 at normal atmospheric pressures and temperatures evaporates so quickly that it tends to freeze anything that it contacts. For this reason, extreme care must be taken to prevent any liquid refrigerant from coming in contact with the skin and especially the eyes.

Freon-12 is readily absorbed by most types of oil. It is therefore recommended that a bottle of sterile mineral oil and a quantity of weak boric acid solution be kept nearby when servicing the air-conditioning system. Should any liquid refrigerant get into the eyes, use a few drops of mineral oil to wash them out, then wash the eyes clean with the weak boric acid solution. Seek a doctor's aid immediately, even though irritation may have ceased.

Always wear safety goggles when servicing any part of the refrigerating system.

Fig. 6—Typical gauge connection for making the various tests.



The freon-12 in the system is always under pressure. Because the system is tightly sealed, heat applied to any part would cause this pressure to build up excessively.

To avoid a dangerous explosion, never weld, use a blow torch, solder, steam-clean, bake body finishes, or use any excessive amount of heat on or in the immediate area of any part of the air cooling system or refrigerant supply tank while they are closed to the atmosphere, whether filled with refrigerant or not.

The liquid refrigerant evaporates so rapidly that the resulting refrigerant gas will displace the air surrounding the area where the refrigerant is released. To prevent possible suffocation in enclosed areas, always discharge the refrigerant from an air cooling system into the garage exhaust collector. Always maintain good ventilation surrounding the work area. If the car is to be undercoated, make certain that the undercoating does not plug the evaporator drain tubes.

Although freon-12 gas, under normal conditions, is non-poisonous, the discharge of refrigerant gas near an open flame can produce a very poisonous gas. This gas will also attack all bright metal surfaces. This poisonous gas is generated in small quantities when the flame-type leak detector is used. Avoid inhaling the fumes from the leak detector. Make certain that freon-12 is both stored and installed in accordance with all state and local ordinances.

When admitting freon-12 gas into the cooling unit, always keep the tank in an upright position. If the tank is on its side or upside down, liquid freon-12 will enter the system and damage the compressor. In surrounding air temperatures above 90° F., prolonged engine idle will result in excessively high compressor pressures.

Troubleshooting

Air-conditioning trouble diagnosis guide:

No cooling:



Fig. 7—Vacuum pump (left) is used to evacuate the system when moisture is in it.

Blower system:

Check the following:

- 1.—Blower operation.
- 2.—Electrical circuits.
- 3.—Valve adjustments.

Refrigeration system:

Check the following:

- 1.—Make visual inspection of the receiver safety valve, condenser and compressor clutch operation.
- 2.—Check the sight glass for bubbles. Run the engine at 1,500-rpm with the thermostatic switch control lever set for maximum cooling and the blower on high. Bubbles in the sight glass indicate an undercharge of refrigerant. Check the system for leaks, repair if necessary and charge the system with the proper amount of freon-12.

No bubbles in the sight glass will indicate either a full charge or a complete loss of refrigerant. To determine if there is refrigerant in the system, run the engine at 1,500rpm and set the thermostatic switch control lever at the maximum cooling position.

Open the high-pressure service valve slightly. Allow the gas to escape through the gauge port slowly, observing the sight glass. If bubbles begin to appear, close the high-pressure service valve and make a partial charge of one-

half pound of freon-12. The system will then have a complete charge.

If no bubbles appear, check for refrigerant leaks, repair the breaks, if necessary, and charge the system with the proper amount of freon-12.

3.—Compressor and clutch operation.

4.—Check the high and low pressures (Fig 6). Depending on the surrounding air temperatures, the high and low pressures should show an approximate differential pressure ratio of six or seven to one. The low pressure will be from 12 to 25 pounds and the high pressure will be from 100 to 180 pounds at a surrounding air temperature of 75° F.

Check the system pressures with the engine running at 1,500rpm, all controls set for maximum cooling and the front of the car at least five feet from any wall for proper check.

At idle speed and a surrounding air temperature of 100° to 110° F., the air pressure may go as high as 300 pounds or more.

Keep the high pressure from exceeding 300 pounds with a fan directed at the condenser and radiator.

Low pressure below normal, high pressure normal:

These pressures indicate a restriction between the receiver and the expansion valve or between the expansion valve and the low-pressure service valve. If the low pressure is actually a vacuum, the expansion valve is probably closed tightly.

Shut the system down and allow it to warm to room temperature.

(Continued on page 86)

June: Watch That Heat!

It's time to start watching that summer-time charging rate if you'd save customers' money. Ed Lowery will deal here with some hazards of excessive battery and regulator temp.

Why Our Used-Car Sales Are Up

By RAY BURNETTE

Used-Car Manager, Polk Motor Co. (De Soto-Plymouth)
Alexandria, Va.

A DEALER can sell only as many new cars as he can used cars.

Any dealer in the new-car business has to be in the retail used-car business. The key to his profit lies in this department, and how well he does profitwise depends on how good a job he accomplishes in reconditioning, display and financing arrangements.

We retail on an average of 40 used cars a month, approximately 70%, and wholesale about 15 a month. Total monthly volume in used cars runs about 55 a month. If a used car fails to move off the lot within 30 to 40 days, it is wholesaled.

We have managed to turn this department into a profitable operation, an ample lot for the display of an attractive assortment of makes and models in used cars, a dependable sales force, a legitimate finance institution and a consistent promotion program.

Approaching a used car from the resale value, we inspect interior and exterior thoroughly with a view to investing no more

"We do not hesitate letting the customer drive the used car off the lot and check it with his own mechanic if he wishes," says Manager Burnette.



than \$200 in the average car. Driving the car for about a half or three-quarters of a mile over rough streets and uphill to determine power and performance, we make a point of having the car owner remain with the salesman as the car goes through inspection.

This is to divert the car owner who frequently tries to do too thorough a job of selling and confuses us. In a road-test we are



A dealer can sell only as many new cars as he can move used cars, according to this used-car sales manager.



A thorough cleanup job is done on the interior and exterior of every used car. The firm sold 100 more used cars last year than in 1958.

checking engine, transmission, rear-end, brakes, clutch, function of power steering, etc. We inspect upholstery for tears and soiling, checking floor mats, door panels, sun visors, seat cushions for needed repairs or replacement.

We scan the body of the car closely. If the metal has already been worked on, we know it cannot be reworked. We also check tires, chrome, bumpers and see if the grille is rusted. A \$200 investment in reconditioning would be split \$100 on cleaning up interior and exterior, and \$100 in mechanical repairs.

There are occasions when we find a car worth \$300 in reconditioning. Recently we had a '59 Dodge station wagon that proved in excellent condition after our thorough inspection. The car had low mileage, new tires, needed no mechanical repairs. It had been used commercially and needed some re-upholstering, a little body work and a repaint job. Because it was a '59 car, we put \$350 into it and sold it for \$2,495.

All mechanical repairs are done in our own shop, our own skilled labor putting used cars on our front-end machine, checking engine on the motor analyzer, going over brakes, transmission and steering. However, we contract for all body and paint work, upholstery and seat covers and tire work. Sending all work to one shop, we get special prices and service priority. We find this a satisfactory arrangement, and doubt whether prices could be beaten if this work were carried out under our own roof.

A profitable used-car department must have the right financing for customers. We require a down payment of from 25% to 33½% and finance up to 30 months on used cars. A legitimate finance company has legitimate rates and usually asks for this down payment.

For a steady turnover in used
(Continued on page 80)



Long-time leaders within IGOA appearing on the panel will include (l. to r.): Howard Eves of Pasadena, Calif., Bert Cook of Dallas, Texas, Art Fox of Cedar

Rapids, Iowa, and Ray J. Campbell of Denver. All but Fox, who is president of the IGO of Iowa, are past presidents of IGOA. They'll talk of garage problems.

Top Garagemen to Address IGOA

VETERAN leaders of the Independent Garage Owners of America will appear in a panel discussion of garagemen's problems at the fifth annual convention of the association July 7-9 at Atlanta's Dinkler Plaza Hotel.

As part of a program designed chiefly to have garagemen talking to garagemen, the panel will consist of three past presidents, Bert Cook of Dallas, Texas, Howard Eves of Pasadena, Calif., and Ray J. Campbell of Denver, Colo. The fourth panelee will be Art Fox of Cedar Rapids, president of the IGO of Iowa.

Moderating the panel will be Harold Grindle of Toledo, who is executive director of the IGO of Ohio. Mel Turner, long-time Chicago garageman and curriculum director of the Automotive Service Industry Association, will "recap" the panel's observations

and supplement them with his own thoughts.

Other program highlights call for an address by Bryan G. Davis of Raleigh, president of the IGO of North Carolina, who will tell how that group came into being with more than 300 members in 22 units in less than a year.

Henry Sorenson of Long Beach, past president of the IGO of California, will also appear on the July 9 part of the program.

Non-garagemen speakers will be Ira Saks of Cleveland, Ohio, executive director of the Ignition Manufacturers Institute and a former parts manufacturer, "The Road Ahead for Garagemen;" Bernard M. Suttler, inspector, Federal Bureau of Investigation, "Fate and the FBI," and, a humorist, the Rev. Hubert A. "Baldy" White, pastor of the Stockbridge (Ga.) Methodist Church, who will

be the banquet speaker Saturday night, July 9.

Directors and delegates' meetings will be held July 7 and 8, with time out for a "genuine" Southern barbecue at Grant Park July 7 and a luncheon and tour at John Rogers Co., engine rebuilders, July 8.

H. F. "Red" Reagin of Atlanta, president of IGOA, said that attendance was expected to approximate 400. He and Harry Wright, president of the IGO of Greater Atlanta, will preside over the various events.

Preceding the annual banquet will be a cocktail party given by Automotive Affiliated Representatives, Automotive Booster Club B-6, Georgia Automotive Wholesalers Association and the IGO of Greater Atlanta.

The registration desk will open Wednesday afternoon, July 6, for early arrivals.

A special program has been developed for the ladies and children.

Some decorations for the convention site will emphasize the Confederate theme, including a 14' by 8' rebel flag to be displayed in the banquet hall Saturday night.

Committees composed of all facets of the service market industry have been holding a series of meetings to assure the success of the convention. Atlanta garagemen have been aided by their fellow members from other units within Georgia.



Mel Turner (left), seasoned garageman of Chicago and curriculum director of the Automotive Service Industry Association, will recap the comments to be made by leaders of IGOA in a panel discussion of garagemen's problems which will be a highlight of the convention. He has addressed many state wholesaler association conventions over the nation and has "brought down the house" with his caustic, but pertinent, comments about every-day happenings in the life of a typical garageman and his suggestions for improving the picture. He has been a leader in promoting programs over the nation to train mechanics as a step toward offsetting the terrific shortage of skilled help in automotive repair shops.

Readyng the Cooling System for July

By E. S. HARRIS

THE principle of the automotive engine indicates that its power or energy to accomplish work is derived from the heat generated by combustion of fuel inside its cylinders.

Its thermal efficiency is the proportion of work extracted from the total amount of heat generated. In the following paragraphs it can be seen that the difference between the total heat generated and the amount of heat turned into work is considerable, and since it is the job of the cooling system to dispose of this proportionately large difference, it will be seen that the cooling system's proper operation is as vital a part of engine service as any other job the mechanic can turn his hand to maintain.

Early in automotive history when the hand crank was an attached and working part of the automobile, engineers came up with these figures as a fair accounting of the distribution of heat



The Model T was about the last car to use the thermo-syphon type of cooling system.

by a good gasoline engine:

Heat transferred into useful work, 17%.

Heat transferred into cooling system water, 52%.

Heat lost through exhaust gases, 16%.

Heat loss by conduction and radiation, 15%.

After three or four decades of toying with these figures and the

automotive powerplant, the more modern engineers working on more modern engines came up with these startling figures:

Of the total energy or heat in gasoline, heat lost in cooling water and oil, 35%; heat lost in exhaust gas, 35%; heat lost in engine friction, 5%, and heat lost in power train friction, 10%, or a total of 85%.

Water pump shaft and seal must be snug and true to keep fan out of radiator and air out of coolant, in addition to its water-moving and sealing function.

High-pressure-type cooling systems call for special thermostats capable of operating under the demands brought on by these conditions.





A can of water on a hot plate with a thermometer sensing bulb in water can be used to check opening and closing temperature of a thermostat.



Watch for indications of coolant leakage when the system was hot, for the leakage may stop when pressure is down and the engine is cool.

Take 85% from 100% and you get 15% remaining to propel the car!

The modern engineers' answer to the old-time engineers' figures were simply that they had overlooked certain debit entries, and were probably better engineers than they were bookkeepers.

But any way the mechanic looks at it, even though some thermal efficiency improvement has been claimed in the last few models since the above accounting, there is still considerable heat to be disposed of through the cooling system.

And in some cars the engine heat surplus has had the automatic drive heat surplus added to the radiator's job, since a heat-exchanger unit is situated in some automatic transmissions, and the radiator coolant circulates through it to pick up this fresh heat supply for disposal through radiation into the atmosphere.

Mechanics from each era of automotive development have faced different cooling system problems. Some few of the problems have carried on down through all the models, and these are considered the standard checks to make when tricky problems arise, or when the system is given a preventive maintenance going over to keep it out of trouble.

For instance, the early-day motorist often taxed the mechanics' ingenuity to find adequate solvents

to dissolve the home-grown "never-leak" concoctions placed in their thermo-syphon-type cooling systems.

When radiator core construction was rugged, with large circulating tubes of various design, the owner made use of bran, black pepper, egg whites and many sundry other materials to seal up leaks—and finally clog the radiator, but good. This problem is not altogether of the past. While food-stuffs are rarely inserted in the filler neck, the .023" to .070" tubes in modern radiators aren't receptive to many of the antique leak sealers the owner has preserved in his garage shelf and sees fit to serve up to make a quick repair.

Likewise, then as now, the amateur cooling system cleaning job can throw the circulating passages for a loss when the cleaning material acts to clean the radiator core nicely, but at the same time loosen great gobs of rusty, greasy corrosion and similar goop from the inside of the engine block and start it gradually circulating in the system until it clogs the radiator core far worse than it was before.

While some of the pre-War I cars used the gravity, or thermo-syphon cooling systems, where circulation was induced but gently, as only the motion of heated water rising and cooled water falling was the motive force, even then many engines were factory-

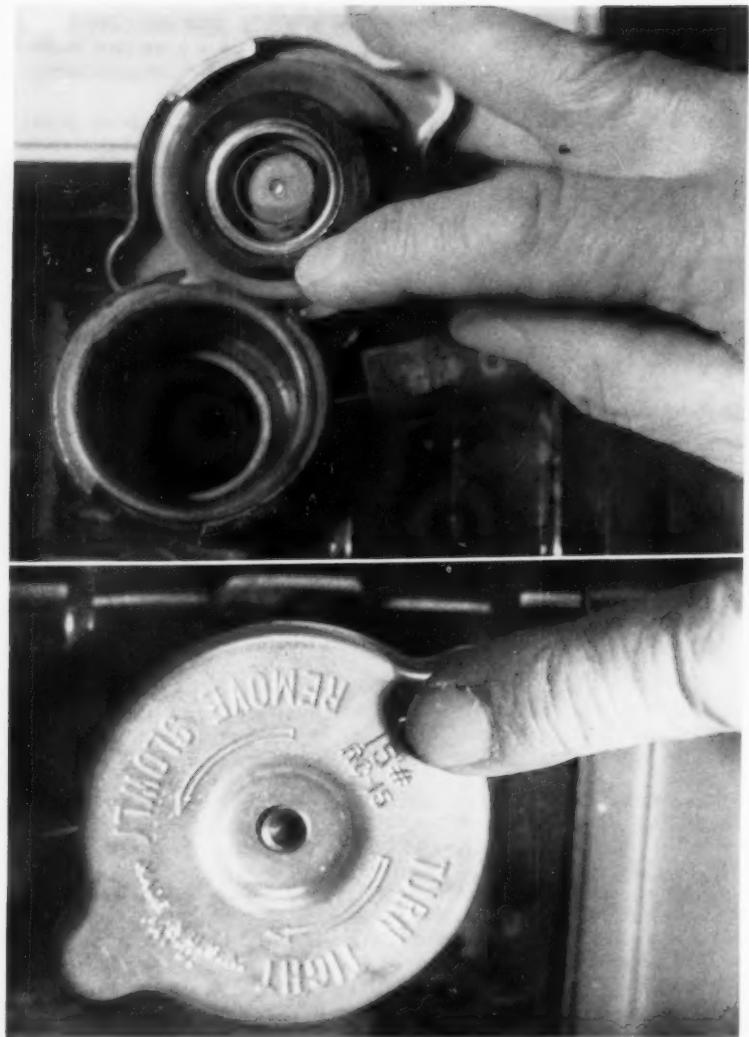
equipped with a water pump. But the water pumps were not always as we know them, and were situated and operated differently, usually being driven by the timing gears by a shaft through a hose or fiber joint which would snap in case the pump was frozen and could not turn. While some of the pumps were the centrifugal type, there were also rotary, gear and propeller types in use.

With the water pump came problems, many of which are still with us. If the radiator core became slightly clogged so that the flow was hampered, the radiator overflowed as the pump continued moving more water than it could swallow. Likewise, pressure, both plus and minus, was placed on the radiator hoses.

In order to keep the pump inlet hose from collapsing under pump suction, usually only a small length of hose was used at each end of a section of pipe. Later, when longer hoses came into use, coil springs were placed inside the hose to discourage its collapsing.

(One car at least, the Locomobile, had a water pressure gauge on the dash panel so the driver could race up his engine and observe his water circulation pressure, and thus judge if the pump was working or if he was low on water.)

With the water pump came an internal rusting problem, the source of which was long in being



Top: Inspect to see that rubber seal is in good condition and has a clean seat in the radiator neck.

Above: Check pressure marking on cap to see that it is the correct one for the system.

On-the-car flushing once or twice a year should keep the system clean.

A radiator flow test made before and after cleaning will reveal quality of the cleaning job.



recognized, and it's a problem that has remained with us, namely air-intake into the cooling system from leakage points on the intake side of the pump. Leakage at the lower hose, pump shaft or thereabouts admits air into the coolant, causing rusting. (The leakage of firing chamber gases into the coolant past the head gasket didn't, for most cars, come until later years, for most of the old-timers had the head cast enblock. For those that did have the removable cylinder head, however, the leakage could appear, even though the pressures were considerably less.)

After the engineers got the coolant circulating nicely, with pumps and all, came the bitter truth that cooling is a more delicate thing than just carting off all the heat possible. Overcooling and its bad effect on performance and lubrication quickly became evident. Warmup is delayed and overcooling evident when the coolant is too quickly swished away to the radiator, carrying the heat the engine requires for proper operation. This situation was first handled by some with radiator shutters and various other manually-operated curtains and covers over the radiator core, later to be followed by shutters operated thermostatically.

Since then, of course, various dependable thermostats have been developed which seal off circulation until the desired operating temperature is reached. One manufacturer uses three thermostats in each engine to establish warm-up zones in the system, and several new thermostats have been developed to operate in pressurized systems.

Full-length water jackets around the cylinders in the 1930's created more uniform cooling over



Boiling the core in a chemical vat may free clogged passages untouched by an on-the-car boil-out.

the cylinder surfaces and the much-increased heat output of higher-compression engines was nicely regulated, at least in theory. But in actual practice, under heavy service the peak load of surplus heat, which might be enough to heat a large building on a cold day, was not always disposed of as completely as planned. Scuffed rings, weakened valve springs and other engine troubles bore witness that while some retained heat was beneficial, too much retained heat was murder.

At this point of the search for the cause of the poor heat transfer it was found that the water pump could move water satisfactorily at low temperatures, but at high temperatures its output would fall off in direct proportion to increasing heat and rpm due to cavitation. In other words, when the coolant reached high temperatures, the impeller was spinning in an airlock, while the coolant stood in its tracks.

By adding pressure to the coolant they could get the water to moving again, it was found, and general cooling efficiency was improved. So in the 1940's pressurization of the cooling system was begun, and the mechanic got himself a new job, namely, trying to find leaks which only appear under pressure.

Likewise he must check the pressure cap to make certain it is making a good leakproof seat in the radiator neck, that its gasket

is good, that it has proper pressure release point for the particular system, and that it does relieve at that pressure. A pump and gauge pressure tester for checking the cap release point and for adding pressure to the system to check for leaks simplifies this operation considerably.

The fan and the water pump are the two moving parts assigned the job of moving the coolant to the radiator and then helping dispose of its excess heat. In grandpa's day the fan wasn't a part of the water pump as it is on so many cars of recent years, nor was it involved in a belt system that operates other units like the generator, power steering, air conditioner and what-have-you.

Belts driving these old-time fans were either the link leather, flat leather or woven rubberized. Some of the fans rotated on shafts driven by the timing gears or sprockets. These fans usually were protected by a clutch which could slip on sudden rpm change, or if the fan struck an obstruction. The modern fan drive is usually the V belt, the tightening of which depends on the type of belt and the belt's arrangement, so it is well to check the factory-recommended method of tightening as well as the method of arriving at the proper tension.

The slip-clutch idea of yesterday has some modern similarity in fans which are made to slip at high rpm or that are thermostatically controlled to stop operating when engine temperature is at a predetermined point. Modern engines turn up to a point that the fan can overdo the cooling if allowed to

continue spinning at full rpm, as well as taking a sizable bit from engine power.

In considering the various components of the cooling system we have mentioned "water" as the coolant, although this is not always the case, for there are anti-freeze solutions of various concentrations in many cooling systems both winter and summer. Sometimes the use of anti-freeze in the system in the summer is according to factory recommendation, as in the case of air-conditioner-equipped cars.

Sometimes it is a case of misunderstanding, forgetfulness, or personal conviction that anti-freeze is left in the system during the summer, and sometimes the same mixture is used the next winter. More about that later.

A chemist can spend a long holidy analyzing the many harmful chemicals formed in the coolant from various natural and unnatural causes, and a mad scientist can work himself into a dither considering the damage these chemicals can do to an engine. Since we've discussed the enormity of the cooling system's job, it is easy to see that any formations that result in an insulating coat over any of the cooling surfaces of the radiator or the engine can result in a hitch in the heat transfer scheme that can result in real trouble.

Without entering into a lengthy discussion of anti-freezes and their chemical properties, it can be said in brief that the base material in anti-freeze is subject to breaking down to form organic matter and aldehydes and that inhibitors used

(Continued on page 80)

Removing the radiator tank may be necessary so the passages can be rodded out.





Memphis' Air-Conditioned Garage

GARAGES looking for ways to increase shop volume during sweltering months when efficiency often is at low ebb can take a tip from a progressive Memphis, Tenn., garage that chose to do something—rather than just talk—about the weather.

As a result, it's Memphis' first fully air-conditioned garage.

And with a thermostat set at 72°, no one at Walls Automotive Service is worrying about how hot it's going to get this summer—at least during working hours.

Before you jump to hasty conclusions about the cost of air-conditioning your own shop, consider some facts and figures supplied by Howard Walls on the operation he's so proud of now that it's the coolest, most comfortable garage in Memphis.

Walls had a 15hp air-conditioning unit installed last August. Actual cost of the equipment and installation was \$3,521.

Cost of operating the all-electric system, his utility bills show, is around \$2 a day. Admittedly, Memphis' low city-owned power figures in the modest daily cost. The unit runs from 7 a.m. to 6 p.m.

By RICHARD LANE

Last summer, after the shop was air-conditioned, business suddenly shot upward. Walls' Automotive Service is never an idle place. It has a good, steady clientele—about 8,000 different jobs are handled by the mechanics during a 12-month period. Yet gross volume increased as much as \$500 a week after air conditioning. During the remainder of the summer it actually averaged \$400 a week higher than for weeks immediately prior to air conditioning.

Walls naturally hesitates to give air conditioning the full credit for this rather substantial increase, but he isn't at all reluctant to give air conditioning a good share of the credit.

How does he know air conditioning has helped his volume?

"My customers are tickled to death," Walls reported. "I've had any number tell me, 'Isn't it just fine!' During an especially hot spell late last summer, one customer laughingly told me, 'I'm coming back next week and stay the whole week.'

"Customers used to drive in, get

out of the car and quickly duck into my office. I've had a one-ton air conditioner there for several years. Now they don't mind waiting in the shop. Cool and comfortable, they will stay with the mechanic and explain their service problem—may stay there and watch him do the job.

"The shop air-conditioning equipment cools 4,500 square feet of space. Actually, the air-conditioning engineers' survey showed a 12hp unit would do the job, but I chose 15hp just to be on the safe side.

"The unit takes no working space. There is nothing on the floor or on the roof. The equipment is suspended from the ceiling.

"On the hottest days before air conditioning, mechanics simply had to take an occasional break to try to cool off. It was rough working on hot motors. Now with shop temperature hovering around 72°, it doesn't take as much time for a motor to cool enough so a mechanic can tackle it. There is less fatigue and fewer breaks. That means most jobs work out faster."

"I have always believed in keeping my mechanics happy. Most of them have been with me more than

Since this operator spent \$3,521 to cool his shop, volume has climbed as much as \$500 a week—and much of this he attributes to the cooling plant.



Suspended duct work (arrow) supplies the cool air.



It costs \$2 a day for power to cool the shop (left).

ten years. All are factory-trained. Air conditioning is just another important means of keeping them contented on the job—and keeping turnover to an absolute minimum. Personnel turnover can be very costly. Weigh factory training and on-the-job experience against the cost of air conditioning, then consider increased shop efficiency and volume as well as customer comfort and good-will before asking yourself if you can afford air conditioning. Maybe you should ask yourself if you can afford to do without it."

Walls has five full-time mechanics and one part-time man. H. L. Agee, who has been with Walls most of the 15 years he has been in business at 578 South Highland Street, is shop foreman. The mechanics have 114 years' total experience.

Walls uses an incentive pay plan to further keep his mechanics happy. They receive 50% on shop work.

Operating an Esso Servicenter in connection with his garage, Walls has a total of 15 employees in shop, parts, office and on the gas pumps.

Walls' Automotive Service offers complete repair service except for body work and paint. Work includes brakes, alignment, lights, tune-up, steering, wash and steam cleaning. The shop has its own radiator repair department, added recently.

It is a model, neat garage, with a pleasing floor plan and modern, work-saving equipment. There is no wasted space.

Two front doors, ten and 12' wide, allow easy entrance from a busy street. A 12' door in the rear opens onto an alley and permits through traffic. The building—an

old ice house when Walls took it over in 1944 but remodeled twice since then—sits back 25' off the street and provides parking space for ten cars in front and for others in the rear.

The floor arrangement is enough to make many old-time mechanics grin with delight. There is room for 16 cars on the floor without crowding. Workbenches, with individual air lines, are recessed into walls. There is an overhead traveling crane and electric hoist. Electric drop cords are used; there is no stumbling over cords on the floor.

Three floor ducts eliminate exhaust fumes. Walls is especially

proud of this system. The ducts are connected directly to exhaust pipes of cars being serviced and a strong fan sucks fumes out of the building.

Walls concentrates his minor service work up front. Thus, the front-end of the shop is never tied up for long and there is no great shuffling or moving of cars to take care of in and out traffic.

Prominent on a wall near the front door are 20 framed certificates and diplomas awarded to Walls' mechanics for completing factory training courses. They invariably catch the eyes of customers and are an impressive display

(Continued on page 85)

Owner Howard Walls is proud of his air-conditioned shop and of his highly skilled mechanics, who naturally prefer a cool working place in the hot months. This display, containing certificates and awards for men who have completed factory training courses, is prominently placed near the front door to impress customers with the mechanics' knowhow.



Tune-Up Tips on the Falcon

By E. S. HARRIS

UP UNTIL this year of our Lord, 1960, demand for tune-up information on the Falcon had suffered a severe decline. In fact, the few mechanics who could remember the pre-depression Falcon-Knight at all were quick to admit that few, if any, of their customers were driving them these days.

But the advent of the Ford Falcon has changed all that, and numerous motorists in every vicinity are building up a nice service backlog for servicemen as they pile up mileage on their sprightly compacts. It's considered a sure-thing bet that after becoming accustomed to the mileage their Falcon is delivering, they won't settle for a tune-up that won't assure a continuation of this economical performance.

The motorists' pleasure in driving the new Falcons is duplicated in the mechanics' pleasure in working on them, for accessibility is considerably better than in so many of the bigger jobs that have hidden away the vitals in a maze of accessories. Yet it is easily recognized as a member of the Ford family, and while many of the adjustments are individual, the components and service procedures are in the Ford category, the carburetion and ignition duplicating the standard Ford 6 in many ways (Fig. 1).

The intake manifold and cylinder head are cast in one piece,

Fig. 2—Coolant-heated carburetor spacer prevents carburetor icing.

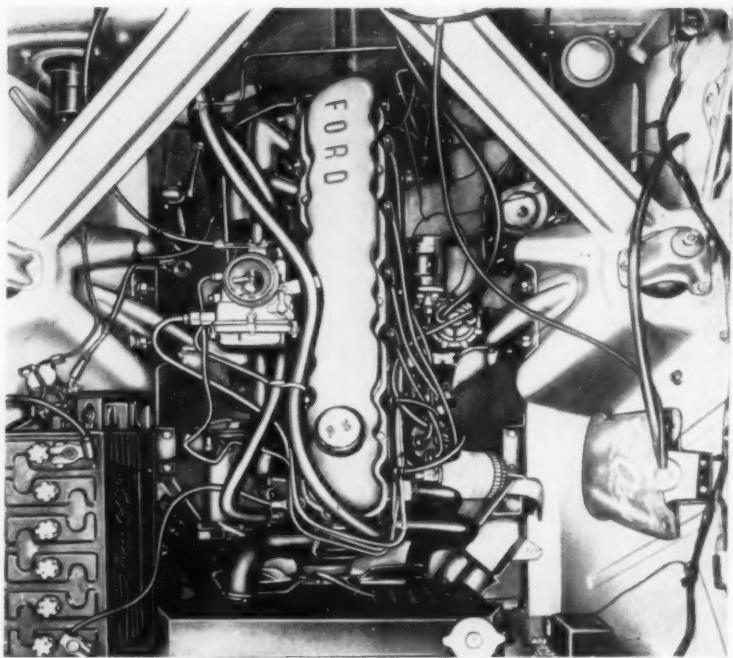
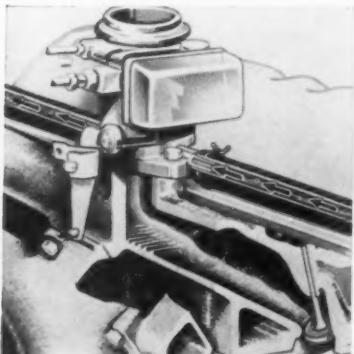


Fig. 1—The Falcon's engine is readily accessible for service.

while the exhaust manifold and the cylinder head are machine-fits and require no gaskets. No heat control valve is used; instead, a part of the exhaust gas is metered to the intake manifold hot spot to heat the fuel-air mixture. To prevent icing at the carburetor throttle plate, any engine-coolant-heated spacer is situated between the carburetor and the intake manifold.

The coolant flows from the front of the engine through the spacer inlet hose into the carburetor coolant spacer. The coolant circulates through the spacer and flows into the heater inlet hose and into the heater. If the car has no heater, there is no hose to the coolant spacer (Fig. 2).

The valve guides are integral with the head. The valves are arranged from front to rear E-I-I-E-I-E-I-E-I-E-I-E. The rocker arm adjustment screws are the self-locking type. Both intake and exhaust adjustment is .016" hot. A go-no-go gauge with .015" and .017" steps is used in dealerships for adjusting clearances. The rocker arm cover gasket is conveniently notched to retain the

gasket in position during installation. An oil-resistant sealer is recommended for the cover side of the gasket.

Crankcase ventilation is from top-front inlet to bottom-front outlet (Fig. 3).

Distributor:

For those not familiar with the Ford method of spark advance control, an account of the carburetor distributor interlock is important to understand.

Spark advance is regulated by vacuum only. The distributor rotation is clockwise, with engine speed and load requirements satisfied by the action of the breaker plate, which is controlled by the vacuum-actuated diaphragm working against the tension of two calibrated breaker plate springs. The diaphragm moves the plate counter clockwise to advance the spark, while the springs move the plate in a clockwise direction to retard the spark.

Vacuum is transmitted to the distributor diaphragm from two interconnected passages in the carburetor. The opening of one passage is in the throat of the

venturi and the opening of the other passage is in the throttle bore just above the throttle plate. Manifold vacuum to the distributor passes through a spark control valve in the carburetor body.

A calibrated spring holds the spark valve closed, but under steady part-throttle operation the valve is opened against the spring pressure. On acceleration when the manifold pressure drops below a predetermined point, the spark valve is closed by the spring shutting off the manifold vacuum port. Vacuum from the venturi then prevents full spark retard, which would otherwise occur.

As engine speed approaches the throttle setting, manifold vacuum increases to the point it opens the spark valve and allows higher vacuum to operate the distributor.

At high engine speed, manifold vacuum falls, the spark valve closes. This prevents loss of venturi vacuum by the lowered manifold vacuum and assures full spark advance at high engine speed.

The spark valve functions in a similar manner to provide an intermediate spark retard whenever the load on the engine is increased to a degree where normal road load spark advance would be too great and the wide-open throttle spark retard would reduce the efficiency of the engine.

The breaker point set consists of the stationary point bracket assembly, breaker arm and the primary wire terminal. The assembly is mounted on the breaker plate as an assembly and can be replaced without removing the distributor from the engine.

Fig. 4—Alignment and centering of point contact is vital for good performance and long point life.

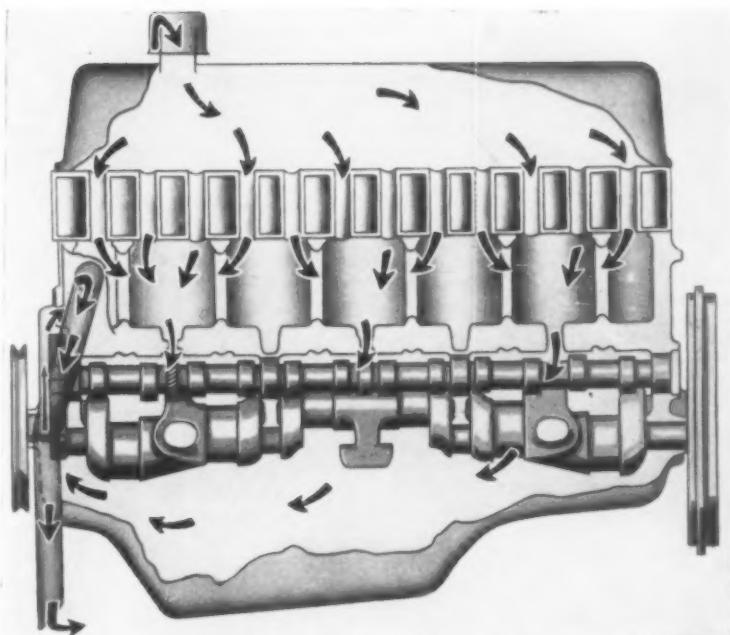
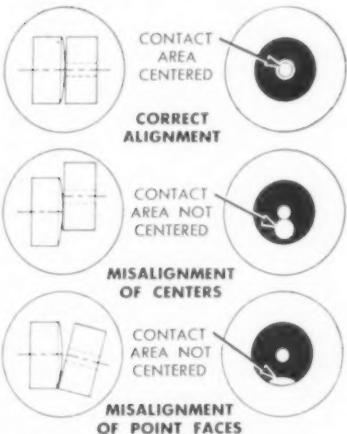


Fig. 3—Crankcase ventilation circulation course.

Stationary point should be adjusted to center the contact point with no misalignment of the point faces (Fig. 4). Point gap is 0.024"-0.026", with the wider gap recommended for the new point installation to allow for rubbing block wear. (Dwell=35°-38°.)

Breaker arm spring tension is 17-20 ounces. Check operation of vacuum advance at the lowest (0.33") and highest (5.35") vacuum and rpm setting for indication of faulty primary spring adjustment when reading is not in limits in the low vacuum range, and faulty secondary spring adjustment if not in limits under high vacuum conditions, as in following table:

Vacuum advance characteristics:
Set test stand to 0° @ 1,000rpm
and 0" of vacuum.

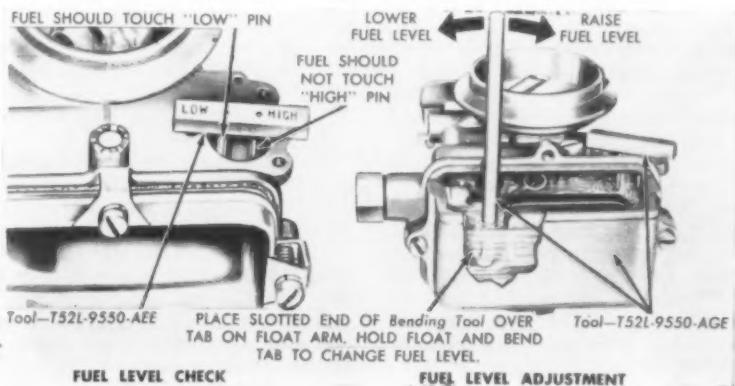
Distributor (rpm)	Advance (degrees)	Vacuum (Inches of mercury)
1000	0	0.33
1000	1½-1½	0.78
1000	3½-4½	1.30
1000	10-11½	3.45
1000	12½-13½	5.00
1000	12¾-14	5.35

Maximum advance limit, 14°.

Condenser capacity is 0.21-0.25 microfarads; minimum leakage megohms, 5; maximum series resistance ohms, 1.

Timing is set with the distributor vacuum line disconnected. Timing

Fig. 5—Fuel level check and adjustment with carburetor installed.



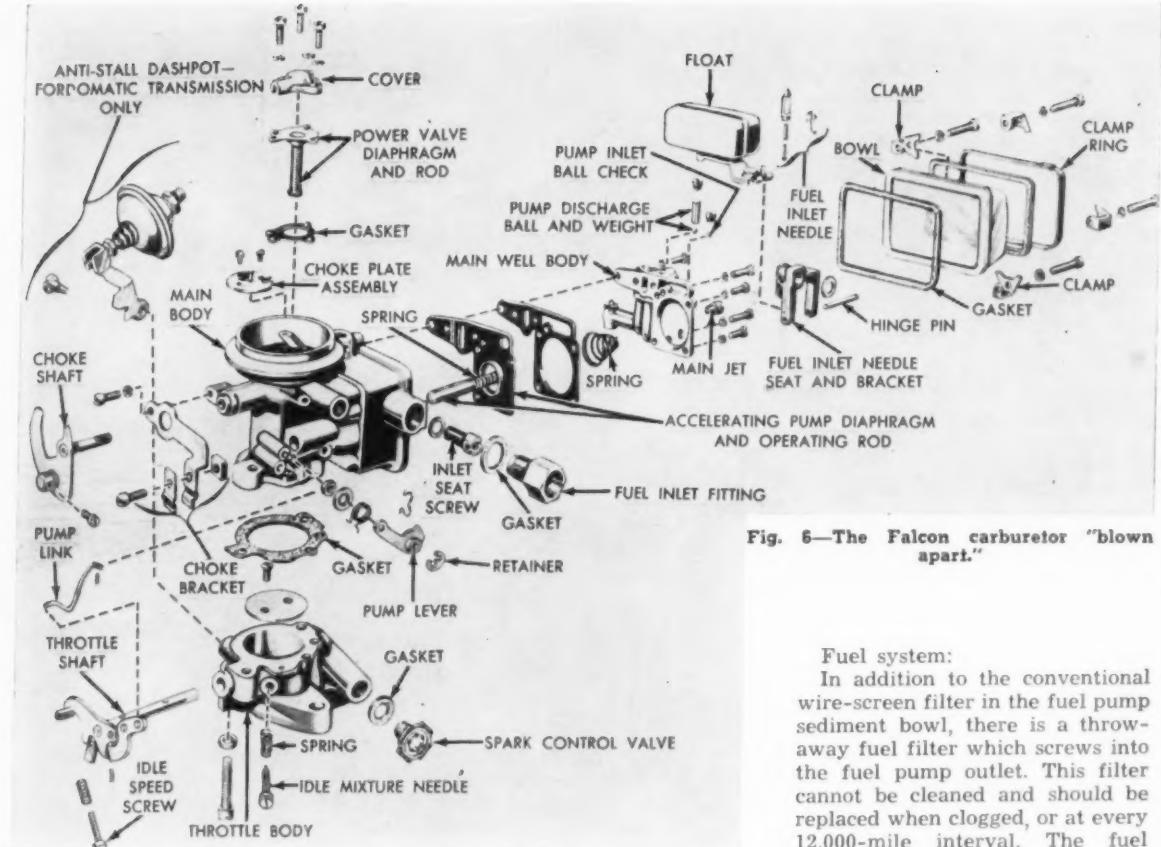


Fig. 6—The Falcon carburetor "blown apart."

marks ranging from tdc to 10° btdc in 2° increments are situated on pointer attached to the engine front cover and are aligned with a notch on the crankshaft pulley. Chalking or painting the notch simplifies timing. Recommended timing setting is 2° btdc on manual transmission jobs, 6° btdc on Fordomatic. (Fudging 4° ahead on standard moving and 2° additional on Fordomatic improves performance in some areas.)

Don't puncture spark plug wire or molded cap to attach timing light. Reconnect the distributor vacuum line and recheck to see if advance mechanism is operating.

There is a resistance wire in the ignition primary circuit instead of a resistor. It can be identified by its pink color. To check the voltage drop of the resistance wire, connect the negative lead of the voltmeter to the battery terminal of the coil and the positive lead to the accessory terminal (center) of the ignition switch. The voltage drop should not be more than 6.6 volts. A greater resistance requires replacement of the wire.

To replace the resistance wire, cut the brown wire and cut the red wire (with the green band) from the upper quick-disconnect at the dash panel.

Cut the wires as close to quick-disconnect as possible.

Solder a male bullet-type terminal to the red wire (green band). Make a single terminal of the two wires.

Using a female bullet terminal connector, connect the wires to one end of the service replacement resistance wire. Do not splice the resistance wire. Drill a $\frac{3}{4}$ " hole through one of the accessory dimples in the dash panel and install a grommet.

Thread one end of the service replacement resistance wire through the grommet in the dash panel. Connect it to the jumper wire at the ignition switch. Make sure wire is routed through the retaining clips. Cut off and discard (at the point where it enters the taped area) the length of defective resistance wire which is not enclosed in the taped portion of the wiring assembly.

Fuel system:

In addition to the conventional wire-screen filter in the fuel pump sediment bowl, there is a throw-away fuel filter which screws into the fuel pump outlet. This filter cannot be cleaned and should be replaced when clogged, or at every 12,000-mile interval. The fuel pump specs are as follows:

Minimum intake vacuum (hg) @ 500 engine rpm, 6.

Eccentric total lift, 0.290-0.310.

Minimum booster pump vacuum (hg) @ 500 engine rpm, 10.

Fuel pump static pressure psi @ 500 engine rpm, 3.5-5.5.

Min. fuel pump volume (flow) @ 500 engine rpm, one pint in 30 seconds.

The air cleaner also has a throw-away, dry-type fiber filtering element. It can be cleaned by striking sealing surfaces squarely on flat surface. Compressed air can be used from inside out. Don't immerse in solvent.

Carburetor:

Some carbs have glass float bowls; others are of metal. Engine idle speed adjustments are made as follows:

1.—Place the transmission selector lever in neutral position and set the hand brake.

2.—With engine heat stabilized (1,200 rpm fast idle for 30 minutes), attach tachometer and set idle speed to specs with selector in neutral for manual-shift transmission. Set idle speed with selector lever in drive-range position. Adjust idle mixture and

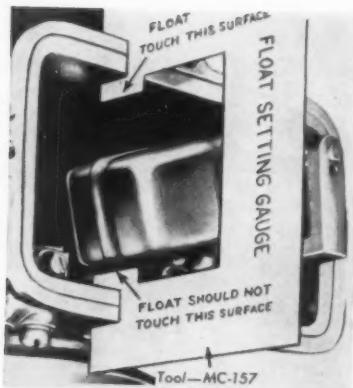


Fig. 7—Float level check during bench job.

check to see if idle speed is still within limits.

Adjust the anti-stall dashpot on Fordomatic-equipped engine as follows:

1.—With idle speed and mixture properly set, loosen the anti-stall dashpot screw.

2.—Hold the throttle in the closed position and depress the dashpot plunger with a screwdriver blade. Check the clearance between the throttle lever and the plunger tip with a feeler gauge. Turn the dashpot in a direction to provide the specified clearance. Tighten in position when adjusted.

The accelerating pump stroke is adjusted by placing the pump link in the throttle lever hole nearest the shaft for average or hot weather, or in the outer hole for cold-weather operation.

Fuel level is measured by using a go-no-go gauge after removing the power valve diaphragm cover and valve assembly (Fig. 5). Fuel gauge is placed in the opening and the engine is cranked. The fuel should touch the tip of the low gauge pin and not touch the tip of the high gauge pin.

If the fuel level is too high or too low, use bending tool and dummy bowl to adjust. First remove the fuel bowl and drain the fuel into a container. Install the dummy bowl, using the fuel bowl gasket and three of the retaining screws. Position a container under the carb to collect spillover. To adjust fuel level, bend the float arm tab. Crank the engine and recheck fuel level.

Float level is checked by another type of gauge when the carburetor is disassembled for a bench overhaul (Fig. 7). Level for float is $23/32$ " below power valve mount-

ing surface, $\pm 1/32$ ".

Idle speed (conventional trans.), 500 - 525 rpm.

Idle speed (Fordomatic, drive range), 475 - 500 rpm.

Initial idle mixture adjustment, $1\frac{1}{2}$ turns open.

Dashpot clearance (Fordomatic), $0.060" - 0.090"$.

In other respects the tune-up procedures are conventional, and all in all, the whole job is reminiscent of the good old days when a mechanic under seven feet tall and with only two elbows could tune an engine while standing flat on the ground.

Chevy Cites Locations Of Body Drains

CHEVROLET has issued the following bulletin on body drain hole locations:

Chevrolet bodies are designed with drain provisions to carry off water which normally enters certain areas of the body. It is important that these drain hole locations be cleaned periodically to insure proper drainage. On new cars the drain locations in the underbody should be inspected to make sure that undercoating is not plugging the drain outlets.

All of the drain hole locations in the body are shown in Fig. 1.

Each door is designed with two drain holes (A) which are located along the door bottom. Their purpose is to drain off water which enters the door inner construction. Each hole is covered by a sealing strip which prevents dust entry into the body. The shaded surface

of the sealing strip should be lubricated periodically to prevent the strip from sticking to the metal.

A drain hole (B) is located in the rocker inner panel beneath the rear quarter window area, and is covered by a sealing strip which prevents dust entry into the rear quarter inner construction. The purpose of this hole is to provide drainage for the water which enters the rear quarter construction beneath the rear quarter window. The shaded surface of the sealing strip should be lubricated periodically to prevent the strip from sticking to the metal.

A drain hole (C) is located behind the rear wheelhouse panel and is formed in the rear quarter outer and rear compartment filler panel pinchweld flange. The purpose of this opening is to insure complete drainage of any moisture which may accumulate in the inner construction while the body is in service.

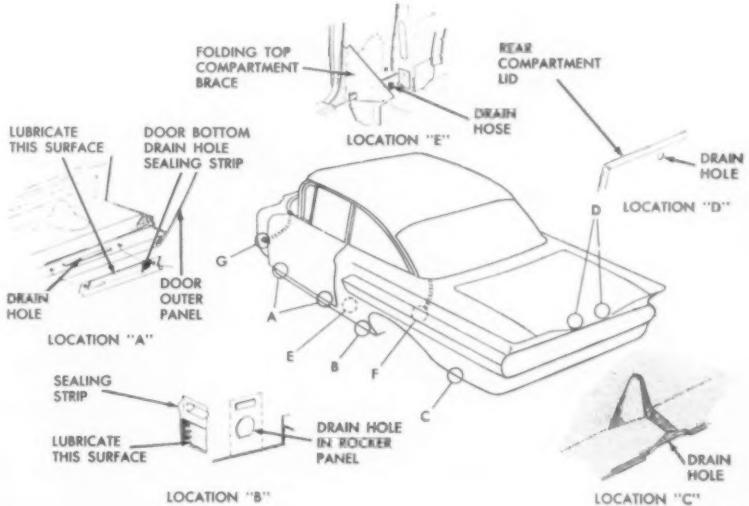
Each lid is designed with two drain holes (D) at the lower edge of the lid. The purpose of these holes is to provide drainage for any water which may accumulate in the lid inner construction.

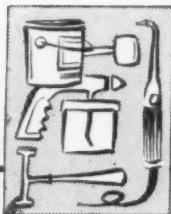
The drain hole (E) in convertible models is located in the floorpan at each rear quarter just forward of the folding top compartment brace. A short drain hose designed to prevent dust entry is installed in each hole.

A drain hose (F) is located at each outer corner of the back window drain gutter. The lower end of the hose is installed through the

(Continued on page 84)

Fig. 1—Body water drain hole locations.





BODY SHOP OPERATIONS

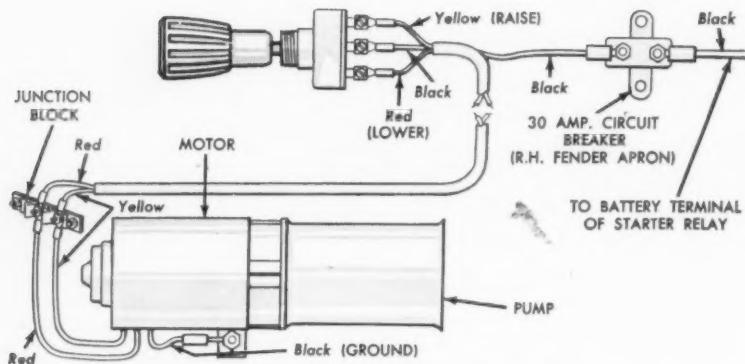


Fig. 1—Convertible top electrical circuit.

Making Tops 'Convert'

By E. M. LOWERY
Technical Editor

WITH the advent of summer and its flash showers, the convertible top may have to be raised and lowered "quick-like" several times in any one day.

To be sure that this can be accomplished, all parts of the top mechanism must be kept in good order, otherwise we will have some very unhappy convertible owners.

If the top cannot be raised or lowered satisfactorily, or if it fails to operate at all, certain mechanical, hydraulic and electrical checks should be made to find the cause of the trouble.

Note: Always check the battery first to be sure that it is in good condition.

Here are some trouble symptoms and possible causes, using the '60 Ford and Plymouth as our guinea pigs:

Symptom: Top does not retract.

Cause: Top control switch. Weak battery. Defective motor. Defective circuit breaker. Faulty wiring.

Defective hydraulic cylinders. Air in system. Bent linkage.

Top action sluggish:

Cause: Weak battery. Faulty wiring. Defective hydraulic cylinders. Air in hydraulic system. Bent linkage.

Top sides operate unevenly:

Cause: Defective hydraulic cylinders. Bent linkage.

Top does not stack:

Rear rail area out of adjustment. Side roof rails do not fit:

Rear rail area out of adjustment. Balance link bracket out of adjustment.

Top does not rise from stack:
Top control switch. Weak battery. Defective motor. Defective circuit breaker. Faulty wiring. Defective hydraulic system. Lack of fluid in hydraulic system. Bent linkage.

Top does not latch:

Bent linkage. Header bow out of adjustment. Rear rail area out of adjustment. Pivot bracket out of adjustment. Toggle clamp out of adjustment. Door window out of adjustment. Quarter window out of adjustment.

Top leaks:

Header bow out of adjustment. Rear rail area out of adjustment. Toggle clamp out of adjustment. Door window out of adjustment. Quarter window out of adjustment. Weatherstripping.

Checking the Ford top:

1.—If the action of the top is slow, raise and lower it slowly and look for bent or misaligned linkage.

2.—If binding is noted when clamping the top at the header, check the alignment of the door and the quarter windows with the side rail weatherstrips. Also check the top sag adjustment and toggle clamp adjustment.

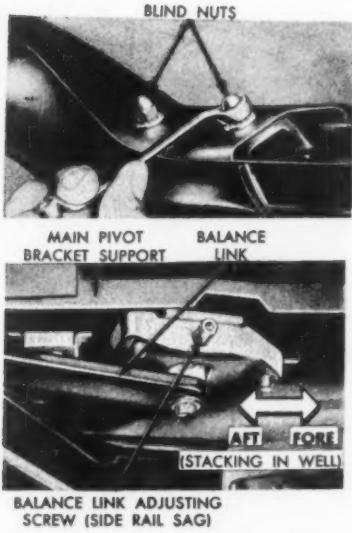
Electrical checks:

The battery charge should be determined before making any electrical checks, because a partially discharged battery will cause slow motor and pump operation.

To check the current draw in the top operating circuit, disconnect the black wire at the circuit breaker (situated on the right fender apron) and connect an ammeter in series in the circuit. Operate the top control switch and note

June: Aligning Chrysler's Unibody

Alignment of Chrysler's new Unibody and the stub frame assemblies calls for new knowhow in many shops. Next month Editor Lowery will try to simplify some of the procedure.



Top: Fig. 2—Header bow adjustment.
Above: Fig. 3—Balance link adjustment.

the ammeter readings. The current draw should be 20-40 amps operating, and 40-50 amps stalled, with a voltage reading of 9-10.

Current in excess of 75 amps indicates a frozen pump or cylinder or a mechanical obstruction. Low amperage with the motor running and no top movement indicates a defective pump or low fluid level in the reservoir.

Top control switch:

1.—Connect one terminal of a test lamp to the black (feed) wire of the top control switch, and ground the other lead (Fig. 1). If the test lamp does not light, there is an open or short circuit between the battery and the switch.

2.—If there is voltage to the switch, connect a jumper wire between the black (feed) wire and the red wire, and then between the black wire and the yellow wire. If the top motor operates, the switch is faulty and must be replaced.

Circuit breaker:

If there isn't voltage to the top control switch, connect a jumper wire across the terminals of the circuit breaker (situated on the right fender apron) and operate the switch. If the top motor operates, the circuit breaker is faulty and must be replaced. If there isn't voltage to the circuit breaker, check the black wire from the circuit breaker to the starter relay.

Switch-to-motor wires:

Disconnect the yellow and the red switch-to-motor leads at the junction block near the motor. Connect a test lamp between the yellow wire and a ground, and check by operating the top control switch to raise the top. Connect the test lamp between the red wire and a ground, and check by operating the switch to lower the top. If the test lamp does not light in

either case, the wire from the junction block to the switch is open or shorted.

Motor:

Check the operation of the motor by connecting first one motor lead, and then the other, directly to the battery positive terminal. If the motor operates in either case, but will not operate when hooked into the wiring harness, check the wiring harness again for short or open circuits.

If the motor will not work when hooked directly to the battery, check the black (ground) wire from the motor. If the motor still does not work, it must be replaced.

Hydraulic checks:

Faulty hydraulic operation can be caused by lack of fluid, leaks, air in the system, obstructions or kinks in the hoses, or faulty operation of a cylinder or the pump.

Fluid level check:

1.—Remove the rear seat and raise the top.

2.—Place absorbent cloths below the filler plug.

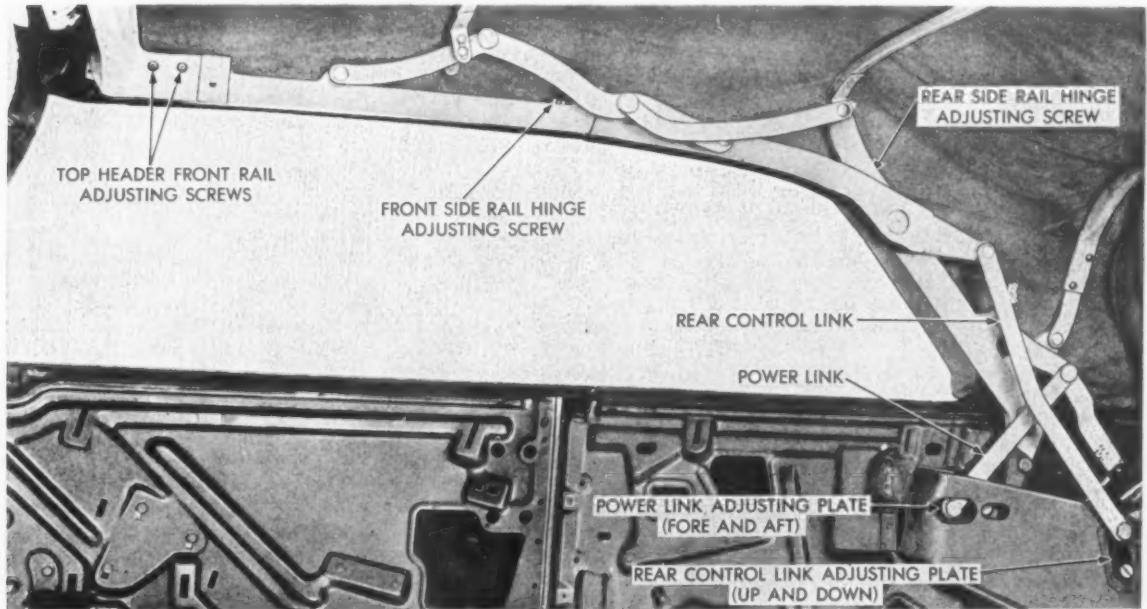
3.—Remove the filler plug and check the fluid level. It should be level with the bottom edge of the hole.

4.—If the level is low, check the system for leaks, adding heavy-duty brake fluid as necessary.

Lift cylinder check:

Remove the rear seat and the quarter trim panels, operate the top control switch and observe the

Fig. 4—Convertible side rail assembly.



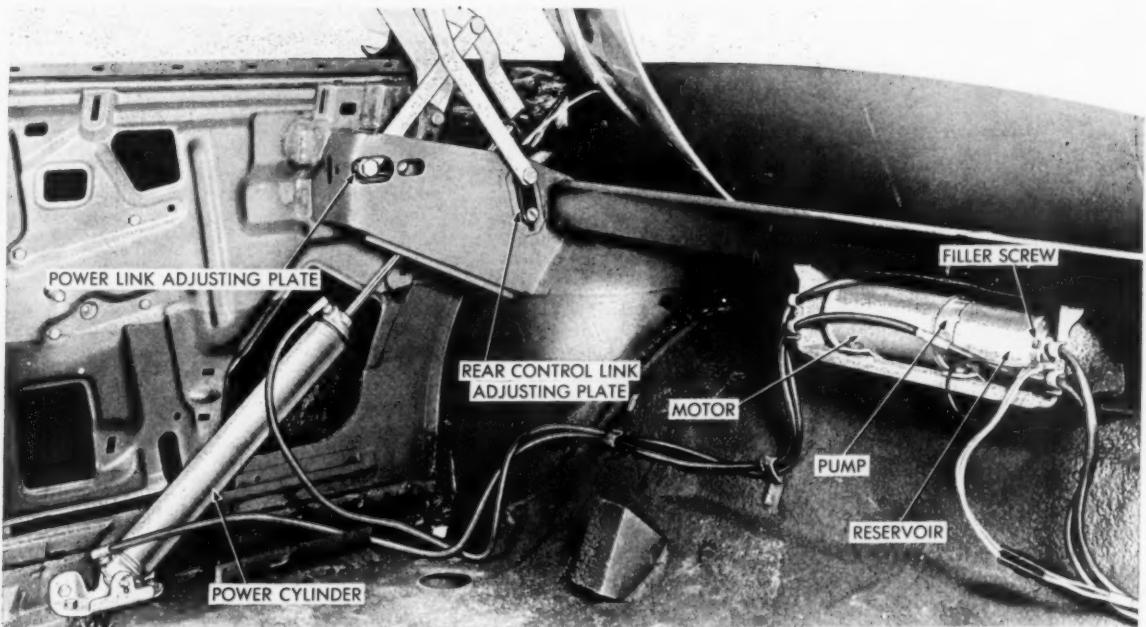


Fig. 5—Convertible top hydraulic folding mechanism.

operation of the lift cylinders for the following:

If the movement of the piston rods is sluggish or uneven, check the hoses from the pump to the cylinders for kinks.

If one piston rod moves more slowly than the other, the cylinder with the slower rod is defective and should be replaced.

If both rods move slowly, or do not move at all, disassemble and repair the pump.

Top adjustments:

If the top is misaligned, corrections should not be made until after a check has been made for bent linkage. All pivot points in the top linkage should be lubricated periodically with light engine oil.

Before aligning the top, visually determine if the trouble results from top misalignment and/or window misalignment. It may be necessary to align both the top and the windows because of the relationship between the two. Adjustments of the door and quarter windows must be checked and any necessary changes made before making top adjustments. These windows must be fully closed to insure proper adjustment.

Header area adjustment:

Header bow:

The header bow can be adjusted fore and aft to provide alignment with the header.

- With a pencil, mark present location of the joint between the header bow and the side rail. This mark provides a measuring point for adjustment.

- Raise the top to a satisfactory working level, prop it in position and remove the screws that hold the front part of the side rail forward weatherstrip to the side rail and the header bow. It is not necessary to remove the entire weatherstrip.

- Using a putty knife, loosen the front part of the weatherstrip from the side rail and the header.

- Loosen the blind nuts (Fig. 2), move one or both sides of the bow fore or aft to get proper alignment at the header and tighten the nuts.

- Loosen the dowels and lower the top to check adjustment.

- After making sure the dowels are aligned with their striker plates, tighten the dowels in position.

Dowel adjustment:

The header bow dowels must be aligned with their striker plates in the header bow. After making any top adjustment, check the dowel alignment and adjust if necessary. After removing the header bow weatherstrip, the dowels can be moved laterally by merely loosening the screws.

Toggle clamp adjustment:

The toggle clamps that hold the header bow against the header can

be adjusted to provide a good seal.

- To determine which side is not sealing, check the weatherstrip between the header bow and the header. Both toggle clamps need not be adjusted unless necessary.

- Release the toggle clamps and thread the toggle hook in or out until adequate sealing pressure is applied at the header weatherstrip.

Balance link adjustment:

The balance link adjusting bracket is mounted on the main pivot bracket support (Fig. 3). Two adjustments are provided at the bracket. Sliding the bracket in the elongated mounting holes permits proper stacking of the top in the well. Turning the Allen head adjusting screw in the bracket corrects sag in the side rails.

Side rail sag:

If the side rail sags above the door glass, adjust as follows:

- Use the top of the door glass and quarter glass as reference points to determine the proper level of the side rail.

- Have the top locked in the fully raised position.

- With an Allen wrench, turn the adjusting screw in the balance link adjusting bracket down to raise the side rail.

- If the side rail is too high, or crowned, above the windows (this does not usually occur), turn the adjusting screw up to lower the side rail.

Top stack:

When the top is stacked, it may be too high or too low in the well. If the top stacks too high, it will be difficult to fasten down the door. If the top stacks too low, the folded side rails may pinch the top material and the resultant chafing may wear a hole in the material. To obtain proper stacking, proceed as follows:

1.—If the top stacks too high in the well, loosen the balance link adjusting bracket mounting screws and slide the bracket forward to lower the top in the well.

2.—If the top stacks too low in the well, loosen the balance link adjusting bracket mounting screws and slide the bracket rearward to raise the top in the well.

3.—After the top is properly stacked, adjust the bumper screw.

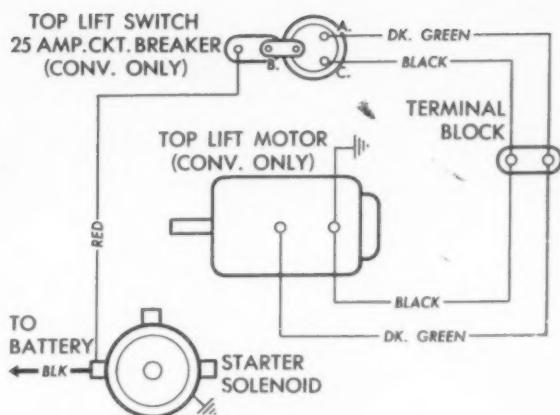
Main pivot bracket adjustments:

The main pivot bracket is mounted on the main pivot bracket support. The support is mounted to the inner quarter panel and the wheelhouse extension. The main pivot bracket and its support provide for shifting of the entire top assembly, fore and aft, up and down, and laterally. Because movement of the main pivot bracket will disturb several adjustments, move this bracket only after other adjustments have failed to solve a specific problem.

Fore and aft adjustment:

This adjustment moves the top assembly straight forward or rearward to obtain a good fit between the rear side rail weatherstrip and

Fig. 6 — Wiring diagram for hydraulic top.



the rear edge of the quarter glass.

1.—Loosen the screws which retain the main pivot bracket support to the inner quarter panel and to the wheelhouse extension.

2.—Shift the entire pivot bracket support fore or aft as required to bring the rear side rail in proper relationship to the quarter glass.

3.—Check the quarter glass operation and tighten the mounting screws.

Vertical adjustment:

This adjustment moves the top assembly up or down to obtain a good fit between the rear and center side rail weatherstrip and the top of the quarter and door glass.

1.—Loosen the screws which retain the main pivot bracket to its support.

2.—Shift the main pivot bracket

up or down as necessary to level the side rails with the quarter and door glass.

3.—Make sure the weatherstrip is not bottomed on the glass frame, and tighten the screws.

Lateral adjustment:

This adjustment shifts the top assembly sidewise to obtain a good seal between the side of the rear side rail weatherstrip and the side of the quarter glass frame.

1.—Loosen the screws which retain the main pivot bracket to its support.

2.—Shift the main pivot bracket toward either side as necessary to obtain the proper interference fit between the side of the rear side rail weatherstrip and the side of the quarter glass frame.

3.—Check the operation of the quarter glass and move the main pivot bracket as necessary to relieve any binding condition. Tighten the mounting screws at this time.

4.—If proper sealing and quarter glass operation cannot be obtained with this adjustment, adjust the quarter glass guides.

Servicing the Plymouth top:

To lower top:

Release safety catch on locking handle situated in center of header, pull handle down and to the rear. Then push header free of windshield. Be sure convertible top storage compartment is free of articles. The rear window need not be unzipped. Operate the engine in neutral at a speed above idle.

Turn the top control switch situated on instrument panel to the right and hold in this position until top is fully lowered. Fasten top boot over compartment, snapping it at the sides and rear.

Warning: Never attempt to
(Continued on page 88)

"Now this remarkable cleaner removes anything and everything."



1960 PASSENGER-CAR SPECIFICATIONS

(Souped-Up Specs on Standard Models Are Not Listed)

MAKE AND MODEL	Std. Wheelbase	TREAD		ENGINE					FLUID CAPACITIES					WHEEL ALIGNMENT			
		Front	Rear	No. Cylinders and Valve Arrangement	Bore and Stroke	Max. Rated H. P. at R. P. M.	Max. Torque at R. P. M.	Piston Displacement (Cu. In.)	Standard Compression Ratio	Crankcase Cap. (Qua.)	Transmission (A.u. / Psi.)	Fuel Tank (Gal.)	Cooling System (No. Heater) (Qua.)	Caster (Degrees)	Camber (Degrees)	Tee-In (In.)	
BUICK Le Sabre.....	123	62.3	60	V8I	4.125x3.4	54.45	250@4400	384@2400	364	10.25-1	4	24	20	17	-2	+1/2	.0625 to .1562
BUICK Invicta.....	123	62.3	60	V8I	4.1875x3.64	56.11	325@4400	445@2800	401	10.25-1	4	24	20	17	-2	+1/2	.0625 to .1562
BUICK Electra.....	126.3	62.3	60	V8I	4.1875x3.64	56.11	325@4400	445@2800	401	10.25-1	4	24	20	17	-2	+1/2	.0625 to .1562
CADILLAC 62 Sedan, 62 Coupe, 62 Coupe de Ville, 62 Sedan de Ville and 60 Fleetwood.....	130	61	61	V8I	4x3.875	51.2	325@4800	430@3100	390	10.5-1	6	18	21	18 1/2	-1/2 to -1 1/2	0 to ±3%	1/4 ± 1/4
CADILLAC 62 Eldorado, Seville, Bilaritz and 75 Fleetwood.....	149.8	61	61	V8I	4x3.875	51.2	325@4800	435@3400	390	10.5-1	5	18	21	18 1/2	-1/2 to -1 1/2	0 to ±3%	1/4 ± 1/4
CHEVROLET 6.....	110	60.3	59.3	61	2.56x3.94	30.4	135@4000	217@2400	225.5	8.25-1	5	G	20	17	0 to ±1/2	+30° to ±30°	1/4 to 1/4
CHEVROLET 8 (283 cu. in.).....	119	60.3	59.3	V8I	3.875x3	48	170@4200	275@2200	348	8.5-1	4	G	20	17 1/2	0 to ±1/2	+30° to ±30°	1/4 to 1/4
CHEVROLET 8 (348 cu. in.).....	119	60.3	59.3	V8I	4.125x3.25	54.5	250@4400	355@2800	348	9.5-1	4	G	20	21	0 to ±1/2	+30° to ±30°	1/4 to 1/4
CHEVROLET Corvette.....	102	57	59	V8I	3.875x3.64	48	230@4800	300@2800	283	9.5-1	5	9	16.4	15.5	2 to 2 1/2	0 to ±1/2	0 to .12
CHEVROLET Corvair.....	108	54	54	6A	3.375x2.6	27.3	80@4400	125@2400	140	8-1	5 1/2	6	11		5 1/2 ± 1 1/2	3/8 to ±1/8	
CHRYSLER Windsor.....	122	61	59.7	V8I	4.03x3.75	52	325@4600	425@2800	383	10-1	5	21	23	16	C	B	1/4
CHRYSLER Saratoga.....	126	61	59.7	V8I	4x3.75	52	325@4600	425@2800	383	10-1	5	21	23	16	C	B	1/4
CHRYSLER New Yorker.....	126	61.2	60	V8I	4.18x3.75	55.9	350@4600	470@2800	413	10-1	5	21	23	16	C	B	1/4
CHRYSLER 300-F.....	126	61.2	60	V8I	4.18x3.75	55.9	375@5000	495@2800	413	10-1	5	21	23	17	C	E	F
CHRYSLER Imperial Custom, Crown and Le Baron.....	129	61.8	62.2	V8I	4.18x3.75	55.9	350@4600	470@2800	413	10-1	5	22	23	16	+3/4 ± 1/4	D	1/4
COMET.....	114	55	54.5	6I	3.5x2.5	29.4	90@4200	138@2000	144.3	8.7-1	3 1/2	15	14	8.7	11 1/2 ± 1/2	0 to 1 1/2 ± 1/2	1/8 to 1/8
CONTINENTAL.....	131	61	61	V8I	4x3.37	59.7	315@4100	465@2200	430	10-1	5	22	25	23	0 to -90°	0 to +45°	.12 to .19
DE SOTO Fireflite.....	122	61	59.7	V8I	4.125x3.38	53.5	295@4600	390@2400	361	10-1	5	23	23	16	C	B	1/4
DE SOTO Adventurer.....	122	61	59.7	V8I	4.25x3.38	57.8	305@4600	410@2400	383	10-1	5	22	23	16	C	B	1/4
DODGE Dart 6.....	118	61.5	60.1	6I	3.4x4.125	27.74	145@4000	215@2800	225	8.5-1	4	22	20	13	C	B	1/4
DODGE Dart 8.....	118	61.5	60.2	V8I	3.91x3.31	48.9	230@4400	306@2400	318	9.1-1	4	22	20	21	C	B	1/4
DODGE 8.....	122	61.5	60.2	V8I	3.91x3.31	54.3	255@4200*	345@2800*	318	10-1	5	23	20	16	C	B	1/4
DODGE D-500.....	122	61.5	60.2	V8I	4.125x3.38	57.8	310@4500	435@2800	361	10-1	5	23	20	20	C	B	1/4
EDSEL 6.....	120	61	60	6I	3.62x3.6	31.54	145@4000	206@2000	223	8.4-1	4	20	20	15	0 to +1	+1 to +1 1/2	.825 to .125
EDSEL 8.....	120	61	60	V8I	3.75x3.3*	45*	185@4200	292@2200	292	8.8-1	4	20	20	19	0 to +1	+1/2 to +1 1/2	.825 to .125
FORD Fairlane 6.....	119	61	60	6I	3.62x3.6	31.54	145@4000	206@2000	223	8.4-1	4	20	21	15	-0 to ±1	+1 1/2	.825 to .12
FORD Fairlane 8 500.....	119	61	60	V8I	3.75x3.3	45	185@4200	292@2200	292	8.4-1	5	21	21	19	-0 to ±1	+1 1/2	.825 to .12
FORD 8 Galaxie and Special Series.....	119	61	60	V8I	4x3.5	51.2	235@4400	350@2400	352	8.9-1	5	21	21	19	-0 to ±1	+1 1/2	.825 to .12
FORD Falcon.....	109.5	55	54.5	6I	3.62x3.5	29.4	90@4200	130@2000	144.3	8.7-1	3 1/2	15	14	8.7	+1/2 to +1 1/2	-1/2 to +1 1/2	1/4 to 1/4
FORD Thunderbird Hardtop.....	113	60	57	V8I	4.00x3.50	51.20	300@4600	350@4600	352	9.6-1	5	20	20	19	1/2 to 1 1/2	1/4 to 1/4	1/4 to 1/4
FORD Thunderbird Convertible.....	113	60	57	V8I	4.30x3.70	59.17	381@2800	490@2800	430	10-1	5	21	20	22.5	1/2 to 1 1/2	1/4 to 1 1/2	1/4 to 1 1/2
LINCOLN.....	131	61	61	V8I	4x3.37	59.7	315@4100	465@2200	430	10-1	5	22	25	23	0 to -90°	0 to +45°	.12 to .19
MERCURY Monterey.....	126	60	60	V8I	3.8x3.34	46.21	205@4000	322@2100	312	8.9-1	5	20	20	20	0 to -90°	0 to +45°	.12 to .19
MERCURY Park Lane and Montclair.....	126	60	60	V8I	4x3.35	59.17	280@4200	405@2200	382	8.5-1	5	20	20	21	0 to -90°	0 to +45°	.12 to .19
OLDSMOBILE Dynamic 88.....	123	61	61	V8I	4x3.688	51	240@4700	375@2400	371	8.75-1	4	19	20	20	0 to -1	-1/2 to +1/2	0 to 1/2
OLDSMOBILE Super 88.....	123	61	61	V8I	4.125x3.688	54	315@4600	425@2500	394	9.75-1	4	19	20	20	0 to -1	-1/2 to +1/2	0 to 1/2
OLDSMOBILE 88.....	126	61	61	V8I	4.125x3.688	54	315@4600	435@2600	394	9.75-1	4	19	20	20	0 to -1	-1/2 to +1/2	0 to 1/2
PLYMOUTH 6 Savoy, Belvedere and Fury.....	118	60.9	59.6	6I	3.4x4.125	27.7	145@4000	215@2800	225	8.5-1	4	13	20	14	C	B	1/4
PLYMOUTH 8 Savoy, Belvedere and Fury.....	118	60.9	59.6	V8I	3.91x3.31	48.9	230@4400	340@2400	318	9.1-1	4	19	20	20	C	B	1/4
PLYMOUTH Golden Commando.....	118	60.9	59.6	V8I	4.125x3.38	54.3	305@4300	395@3000	361	10-1	5	22	20	16	C	B	1/4
PONTIAC Catalina and Ventura.....	122	64	64	V8I	4.06x3.75	52.8	215@3600	300@2000	389	8.6-1	5	16.5	23	21.2	-1/2 to ±1/2	+1/2 to ±1/2	0 to .125
PONTIAC Star Chief and Bonneville.....	124	64	64	V8I	4.06x3.75	52.8	281@4400	407@2800	389	8.6-1	5	16.5	23	21.2	-1/2 to ±1/2	+1/2 to ±1/2	0 to .125
RAMBLER American.....	100	54.62	55	6L	3.125x4.25	23.4	90@3800	150@1600	195.6	8-1	4	20	22	11	C	A	±1/4 to 1/4
RAMBLER 6.....	103	57.75	58	6L	3.125x4.25	23.4	127@4200	180@1600	195.6	8-1	4	20	22	10	C	A	±1/4 to 1/4
RAMBLER Rebel 8.....	108	58.75	58	V8I	3.5x3.25	39.2	200@4600	245@2500	250	8.7-1	4	22	22	20	C	A	±1/4 to 1/4
RAMBLER Ambassador.....	117	57.75	59.13	V8I	4x3.25	51.2	250@4700	340@2600	327	8.7-1	4	22	22	19	C	A	±1/4 to 1/4
STUDEBAKER Lark 6.....	108.5	57.37	56.56	6L	3x4	21.6	90@4000	145@2000	169.6	8.3-1	5	18	18	11	-1 to -2 1/2	0 to +1	1/4 to 1/4
STUDEBAKER Lark 8.....	108.5	57.37	56.56	V8I	3.56x3.25	40.6	180@4500	195@4500	259.2	8.8-1	5	18	18	17	-1 to -2 1/2	0 to +1	1/4 to 1/4
STUDEBAKER Hawk Coupe.....	120.5	57.5	56.56	V8I	3.56x3.62	40.6	210@4500	300@2800	289	8.8-1	5	18	18	17	-1 to -2 1/2	0 to +1	1/4 to 1/4
VALIANT.....	106.5	56	55.5	6I	3.4x3.125	27.74	101@4400	155@2100	170	8.6-1	4	13	13	13	C	B	1/4

ABBREVIATIONS

*—4-barrel.
 A—Horizontally opposed.
 B—Also 4x3.5.
 C—Left +3%, right +1%.
 D—Also 51.2.
 E—Power Steering +3/4 ± 1/4.
 F—Manual —3/4 ± 1/2.

G—Left +3%, right +1%.
 H—Also 9.6-1.
 I—Also 300@4600.
 J—Also 311@2800.
 K—Valve-in-head.
 L—Also 9.8-1.
 M—L-head.

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1960 PASSENGER-CAR SPECIFICATIONS

(Souped-Up Specs on Standard Models Are Not Listed)

MAKE AND MODEL	ELECTRICAL TUNE-UP							Bat.	FUEL SYSTEM	VALVES			
	Breaker Gap (.0)	Cam Angle (Degrees)	Contact Arm Spring Tension (lbs.)	Ignition Timing (Degrees)	Timing Mark Location	Spark Plug Gap (.0)	Spark Advance Max. Centrif. (Degrees)			Cap. & Ter. Grd.	Carb. Mfr.	Fuel Pressure (lbs.)	Intake Valve Open b or a/cide (Degrees)
BUICK Le Sabre.....	12.5-17.5	.30	19-23	5btcs	VD	30-35	26@3750	21@14°	70N	Ca-St	5 1/4-6 1/2	Au	25btcs
BUICK Invicta and Electra.....	12.5-17.5	.30	19-23	12btcs	VD	30-35	22@3800	17.5@18°	70N	RP-Ca	5 1/4-6 1/2	Au	33
CADILLAC (All Models).....	16	28-32	19-23	5btcs ^b	VD	.35	16@2000	22@16°	70N	RP-Ca	5 1/4-6 1/2	Au	39btcs
CHEVROLET 8.....	19	28-35	19-23	5btcs	FW	33-38	26@3500	22@15.5°	53N	RP	3 1/4-4 1/2	Au	16btcs
CHEVROLET 8 (283-cu. in.).....	19	26-33	19-23	4btcs	VD	33-38	28@3750	15@15.5°	53N	Ca-RP	5 1/4-6 1/2	Au	12.5btcs
CHEVROLET 8 (348 cu. in.).....	19	26-33	19-33	8btcs	VD	33-38	24@4600	15@15.5°	61N	Ca-RP	5 1/4-6 1/2	Au	18.5btcs
CHEVROLET Corvette.....	19	26-33	19-23	4btcs	VD	33-38	28@3700	15@15.5°	53N	Ca	5 1/4-6 1/2	Au	12.5btcs
CHEVROLET Corvair.....	19	.33	19-23	4btcs	CaP	23-28	32@3600	24.5@20°	35N	RP	5 1/4-6 1/2	Au	12.5btcs
CHRYSLER Windsor.....	14-19	27-32	17-21.5	10btcs	VD	.35	21@4600	22@15°	70N	Ca-BB	4-5	Au	15btcs
CHRYSLER Saratoga and New Yorker.....	14-19	27-32	17-21.5	10btcs	VD	.35	21@4600	22@15°	70N	Ca	4-5	Au	15btcs
CHRYSLER 300-F.....	14-19	34-40	17-21.5	5btcs	VD	.35	22@4800	21@14.5°	70N	Ca	4-5	Au	20btcs
CHRYSLER Imperial.....	14-19	27-32	17-21.5	10btcs	VD	.35	21@4600	22@15°	70N	Ca	4-5	Au	15btcs
COMET.....	24-26	35-38	17-20	C	CaP	32-36	F	14@5.35"	40N	Ho	4-5	16	15btcs
CONTINENTAL.....	15	26-28.5	17-20	6btcs	VD	.34	30@4000	22@15°	70N	Ca	5-6	Au	22btcs
DE SOTO FireFlite.....	14-19	27-32	17-21.5	10btcs	CaP	.35	18@4400	22@15°	60N	BB-Ca	4-5	Au	15btcs
DE SOTO Adventurer.....	14-19	27-32	17-21.5	10btcs	CaP	.35	18@4400	22@15°	60N	BB-Ca	4-5	Au	15btcs
DODGE Dart 8.....	17-23	36-42	17-21.5	2.5btcs	VD	.35	25@4400	20.5@12°	50N	BB-Ca	6-7	10	20
DODGE Dart 8.....	14-19	34-40	17-21.5	10btcs	VD	.35	18@4400	22@15°	60N	Ca	6-7	10	17btcs
DODGE 8.....	14-19	34-40	17-21.5	10btcs	VD	.35	24@4300	22@15°	60N	Ca-Ho	6-7	Au	15btcs
DODGE D-500.....	14-19	34-40	17-21.5	7.5btcs	VD	.35	22@4500	21@14.5°	60N	Ca-Ho	6-7	Au	20btcs
EDSEL 8.....	24-26	35-38	17-20	X	VD	32-36	16@2400	22.5@8.1°	55N	Ho	4-5	19	17btcs
EDSEL 8.....	14-16	26-28.5	17-20	Y	VD	32-36	29@4000	22@15°	55N	D	4 1/2-5 1/2	Au	12btcs
FORD Fairlane 6.....	24-26	35-38	17-20	X	VD	32-36	22@4400	22@15°	55N	Ho	4-5	19	17btcs
FORD Fairlane 8 500.....	14-16	26-28.5	17-20	X	VD	32-36	22@4400	22@15°	65N	D	4 1/2-5 1/2	19	19
FORD Galaxie and Special Series.....	14-16	26-28.5	17-20	X	VD	32-36	24@4400	22@16°	65N	D	4 1/2-5 1/2	Au	22btcs
FORD Falcon.....	24-26	35-38	17-20	C	E	32-36	F	14@5.35"	40N	Ho	4-5	16	15btcs
FORD Thunderbird Hardtop.....	14-16	26-28.5	17-20	T	VD	32-36	29@4000	22@15°	55N	D	4 1/2-5 1/2	Au	20btcs
FORD Thunderbird Convertible.....	14-16	26-28.5	17-20	T	VD	32-36	29@4000	22@15°	65N	Ca	5-6	Au	22btcs
LINCOLN.....	15	26-28.5	17-20	6btcs	VD	.34	30@4000	22@15°	70N	Ca	5-6	Au	22btcs
MERCURY Monterey.....	15	26-28.5	17-20	3btcs	VD	.34	22@4000	20@20°	55N	Ho	4 1/2-5 1/2	19	19
MERCURY Park Lane and Montclair.....	15	26-28.5	17-20	6btcs	VD	.34	30@4000	22@15°	65N	Ca	5-6	Au	22btcs
OLDSMOBILE Dynamic 88.....	16	28-32	19-23	5btcs	VD	.30	26@4400	23.5@21°	62N	RP	5-6	Au	14btcs
OLDSMOBILE Super 88.....	16	23-32	19-23	5btcs	VD	.30	26@4400	23.5@21°	70N	RP	5-6	Au	16btcs
OLDSMOBILE 98.....	16	28-32	19-23	5btcs	VD	.30	26@4400	23.5@21°	70N	RP	5-6	Au	14btcs
PLYMOUTH 8 Savoy, Belvedere and Fury.....	17-23	36-42	17-21.5	2.5btcs	CaP	.35	25@4400	20.5@12°	50N	Ca-BB	6-7	10	20
PLYMOUTH 8 Savoy, Belvedere and Fury.....	14-19	27-32	17-21.5	5btcs	CaP	.35	25@4600	29.5@17°	60N	Ca-St	6-7	10	17btcs
PLYMOUTH Golden Commando.....	14-19	27-32	17-21.5	10btcs	CaP	.35	20@4600	29.5@17°	60N	Ca-St	6-7	Au	24btcs
PONTIAC Catalina and Ventura.....	16	30±2	19-23	6btcs	CaP	33-38	20@3600	20@15°	53N	RP	5 1/4-6 1/2	Au	14btcs
PONTIAC Star Chief and Bonneville.....	16	30±2	19-23	6btcs	CaP	33-38	20@2900	20@17°	61N	Ca	5 1/4-6 1/2	Au	30btcs
RAMBLER American.....	20	25-35	17-21	3btcs	VD	.35	12@2100	11@16.5°	40N	Ho-Ca	4 1/2-5 1/2	16	19
RAMBLER 8.....	16	28-35	17-21	3btcs	VD	.35	12@2100	10@16.5°	45N	Ho-Ca	4 1/2-5 1/2	16	18
RAMBLER Rebel 8.....	17	28-32	17-20	1btcs	VD	.35	18@1900	10@15°	60N	Ho-Ca	4 1/2-5 1/2	12	14
RAMBLER Ambassador.....	17	28-32	17-20	5btcs	VD	.35	18@2000	12@14°	50N	Ho-Ca	4 1/2-5 1/2	12	12 1/2btcs
STUDEBAKER Lark 8.....	20	38-40	17-20	2btcs	VD	28-33	14@2800	18@12°	50N	Ca	3 1/2-5 1/2	18	18
STUDEBAKER Lark 8.....	16	28-32	19-23	4btcs	VD	33-38	24@2300	16@12°	50N	St	3 1/2-5 1/2	23-25	11btcs
STUDEBAKER Hawk Coupe.....	13-18	28-34	19-23	4btcs	VD	33-38	24@2400	16@12°	50N	St	3 1/2-5 1/2	23-25	11btcs
VALIANT.....	17-23	36-42	17-21.5	5btcs	CaP	.35	27@3850	25@14.5°	50N	BB	4-5	10	20

ABBREVIATIONS

a—35 btcs with turbine-type trans.
 Au—Automatic.
 b—Q engine 7.5°btcs.
 BB—Bal. and Bal.
 btcs—before top center.
 c—26°btcs on 352-cu.-in.
 c—2°btcs manual, 6°btcs automatic.

Ca—Carter.
 CaP—Crankshaft pulley.
 d—4-barrel, 26°btcs.
 D—Ford or Holley.
 E—Indicator scale on front cover.
 F—Non-centrifugal.
 FW—Flywheel.

Ho—Holley.
 N—Negative.
 RP—Rochester Products.
 St—Stromberg.
 tdc—top dead center.
 tdc—Vibration damper.
 X—4°btcs manual, 6°btcs automatic.
 Y—3°btcs manual, 6°btcs automatic



Texaco Dealers are getting thousands of new customers as a result of Texaco's big Spring TV Contest, now in full swing. Many of them will become *permanent* customers! This is another example of the support Texaco gives its Dealers with seasonal promotions. Full-page ads in 6 leading national magazines will be seen by 75 million readers. On television, the Texaco Huntley-Brinkley Report will tell millions of motorists about this big promotion. There will also be a saturation of TV spot announcements. Newspaper ads will blanket the country. Outstanding display material will attract motorists into Texaco stations. For Texaco Dealers it adds up to more traffic, more *new* customers, more sales. No wonder Texaco Dealers are such *busy* Dealers! They *make more* by selling the best . . . **TEXACO**

SAJ-5

A PROMISING FUTURE is one of the advantages of being a Texaco Dealer or Distributor. There may be an opportunity for you. Investigate—send this coupon to Sales Manager, Texaco Inc., 135 E. 42nd St., New York 17, N.Y.

I would like complete information about the possibility of my teaming up with Texaco as a: Dealer, Consignee, Distributor. (Please check)

NAME _____

STREET _____

CITY _____ ZONE _____

STATE _____

LARK[®] FRANCHISE HIGHEST PROFIT



DEALER GROSS—In the fast-growing Compact Car market—The LARK line has the highest Dealer Gross of any make. (And only one series, of one other make, has a higher Dealer Gross!)

BONUS & INCENTIVES—No other Compact offers bonus and incentive plans anywhere near as generous as The LARK's.

PENETRATION OF INDUSTRY—The LARK has continued to increase its penetration of sales—February ahead of January, and March ahead of February.

MOST WANTED CAR FOR SPORTS MARKET—The dashing 1960 HAWK has new responsiveness with its new 289 HP V-8, and massive finned brakes. *Sells for \$1,000 less than its nearest competitor.* Class winner in Mobilgas Economy Run with 22.9 miles per gallon! And for years, The HAWK has had the highest resale value of its price class. Make extra sales with The Car Designed for Sport!

ONLY FULL LINE OF COMPACTS—6 beautiful body styles... Only compact convertible... Lowest-price V-8... Complete range of options and accessories!

GIVES DEALERS POTENTIAL!



LARK DEALERS ARE GROSSING
FAR ABOVE INDUSTRY AVERAGE

IN ANY
SELLING MARKET
LARK DEALERS PROSPER!
WANT TO JOIN THEM?
SEND THE COUPON... 

GET THE FACTS ON LARK DEALER PROSPERITY

Dealer Development Division

Studebaker-Packard Corp., South Bend 27, Ind.

Gentlemen: Please send me the facts—in strictest confidence—no obligation.

NAME _____

POSITION _____

FIRM _____

ADDRESS _____

CITY/STATE _____

SAJ 5-60

Readers are invited to contribute to—**SHOP TALK**

SAFETY SEARCH

Tallahassee, Fla.

Gentlemen:

In one of your magazines (March 1960), I noticed that you are to have a special issue for the month of April on "Safety."

I am a student enrolled in one

of the "Safety Education" classes and am in search of material that might enable me to make a thorough report on what is being done in the various branches and institutions to prevent accidents and lessen the high rate of deaths on our streets and highways.

I would appreciate very much



A column of informal comments about the automotive trade and its problems.

**now Stant Gas Caps
for all small cars**

Recognized single source for all needed automotive caps . . . Stant has again proven leadership by pioneering the first complete line of gas caps and locking gas caps for all small cars . . . solving the body contour problems. The new Stant caps tap a potential of over 2,000,000 new caps sales. Ask your jobber salesman for the new LGA-800 Assortment.

STANT MANUFACTURING CO., INC.
Connersville, Indiana

LGA-800 Assortment

Standard of the industry and original equipment for a generation

G-83 G-84 G-85

G-24 G-26 G-27

G-24 G-83
1959-1960 Rambler
1956-1960 Ambassador
1959-1960 Lark
Station Wagon
1960 Falcon

G-27 G-85
Valiant

G-26 G-84
1957-1960 Chrysler
Family Station Wagons

STANT
RADIACTOR - GAS - OIL
CAPS

any literature you might send me related to this subject.

ALEXANDER M. MC LIN

Glad to send you a copy of our annual safety issue just off the press.

GERMAN-BORN ENGINE

Del Rio, Texas

Gentlemen:

On page 114 of your March issue I noticed credit was issued to Curtiss-Wright for a new type non-reciprocating engine and I suggest this is incorrect. In the March 1960 issue of Popular Science you will find that Curtiss-Wright has only acquired the right to manufacture engines of this type above 100hp in the United States. The engine has been developed in Germany by the NSU Werke of Neckarsulm, makers of motor-scooters and motorcycles, and is to be used in the Prinz cars by 1961. A complete description and data can be found in the magazine mentioned above.

ROBERT D. WILLIS,
Willis Garage

PLANNING A BULLETIN

Jackson, Miss.

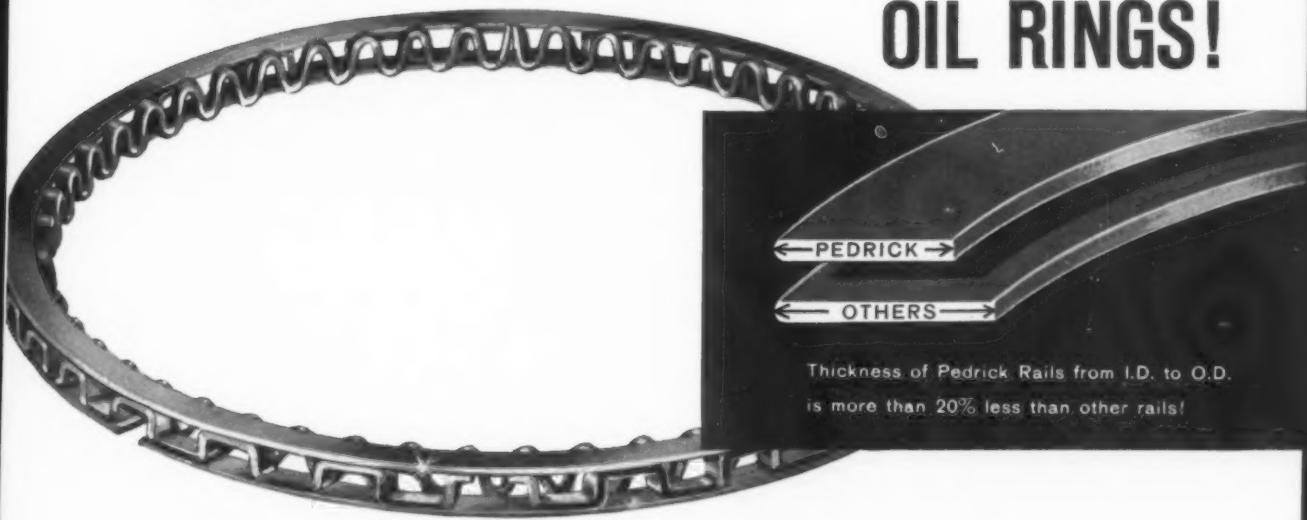
Gentlemen:

For many years we have been a subscriber to SOUTHERN AUTOMO-

Address any comments to: Southern Automotive Journal, 806 Peachtree St., N.E., Atlanta 8, Ga.

Double the **CONFORMABILITY**

WITH
Pedrick FORMFLEX CHROME OIL RINGS!



It is an engineering fact that *20% less radial thickness* delivers *double the amount of flexibility*. And flexibility determines the ability of a piston ring to conform to conditions of cylinder wear and distortion.

Pedrick's distinctive 4-piece construction, in which the "Equalizer" and Spacer are separate pieces, makes it possible to use rails at least 20% less in radial thickness and therefore much more flexible and conformable. Only by using Pedrick Formflex Chrome Rings do you get such exceptional conformability. The results are unequalled overall performance and piston ring life. Ask for them at your favorite jobber.

In addition, PEDRICK FORMFLEX CHROME RINGS are:

- Easy to Install.
- Effective in Side Sealing.
- Effective in Not Plugging.
- All Purpose—for any Kind of Service.
- Chrome-faced for Longer Life.

DEPEND ON

Pedrick

FOR THE BEST RING JOB

WILKENING MANUFACTURING CO., Philadelphia 42, Pa. • In Canada: Wilkening Manufacturing Co. (Canada) Ltd., Toronto 2

TIVE JOURNAL and have enjoyed reading it very much.

For the past two years we have been engaged in preventive maintenance for Shell and Texas and hope to secure other contracts during the year.

We are now making plans to issue a small bulletin monthly to the service station operators and managers. We would greatly appreciate your granting us permission to use excerpts and cartoons from time to time in our bulletin, taken from your magazine—back

issues as well as current issues.

J. L. WHITFIELD,
Whit's

YES, WE GOOFED!

Henderson, Ky.

Gentlemen:

I believe someone goofed in "Time Savers" for your March issue.

On page 182 there is a drawing of a tool to take out points on a Chevy and on page 185 a drawing

of a tool to break loose Powerglide oil cooler lines. Having been a Chevrolet mechanic for 14 years, I believe the pictures are under the wrong headings. Also, the 1½" x 9/16" end wrench mentioned on page 185 would be hard to find!

RUSSELL WEAVER,
Argabrite Chevrolet-
Oldsmobile Co.

Yes, others have also called our attention to this slip-up!

"AIR-CAR" INFO

Falls Mills, Va.

Gentlemen:

In the March 1960 issue of SAJ, page 114, there is a new-type motor built by Curtiss-Wright. I am very interested in this motor and would like more information about it. Can you give me more information, or perhaps the address of Curtiss-Wright's plant that built this motor?

DAVE GOODMAN

You can possibly obtain more information concerning the "Air-Car" from the Public Relations Dept., Curtiss-Wright Corp., Wood-Ridge, N. J.

SOLAR ACCELERATION

A 1912 Baker Electric is said to be the world's first solar-powered electric car.

The rejuvenated antique has been seen tooling through Chicago's Loop with a large solar cell panel attached to its top. The solar cell panel converts the sun's energy to electric power for the use of the car.

Unless your car is a genuine antique, however, chances are the solar cells required for this method of acceleration would cost more than the car itself.

A WOMAN'S PLACE

Discrimination on the basis of sex is prohibited under a new Pennsylvania law.

Act. No. 694 "prohibits discrimination by any employer in any place of employment, between employees on the basis of sex, by paying wages to any employee at a rate less than the rate at which he pays wages to employees of the opposite sex for work under comparable conditions on jobs which require comparable skills."

Variation in payment of wages is not prohibited when based on

NOTHING LIKE IT!

NOTHING LIKE THIS, EITHER!

SWISS LABORATORY, CLEVELAND 14, OHIO
AMERICA'S LARGEST INDEPENDENT MANUFACTURER OF BODY AND WIRE SOLDERS

Full-Time Jobbers Representative Covering the South from Our Cleveland factory.
"PAT" SINEATH (Expert Bodyman)

SOUTHWESTERN REPRESENTATIVES
Ralph L. Jeffress Co.
2023 Lucas Drive, Dallas Tel: LA 6-8567

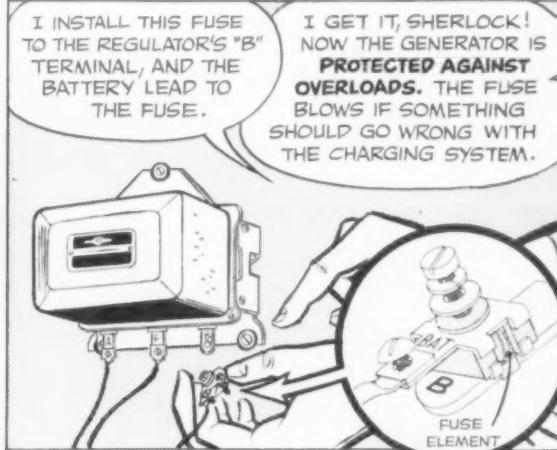
ANOTHER BLUE STREAK
SECRET SERVICE TIP FOR YOU.

SHERLOCK MCKANICK and MIKE

"The Case of the GUARDED GENERATOR"

ANOTHER GENERATOR KILLED
TOO SOON. IF ONLY I COULD HAVE
FOUND THE TROUBLE IN TIME.

BUT MIKE, THERE
IS A WAY TO PREVENT
PREMATURE
GENERATOR
BURN-OUT.



WORLD'S FOREMOST
HEAVY-DUTY
IGNITION LINE



REGULATORS • SWITCHES • COILS • CONDENSERS • CONTACT POINTS • WIRE AND CABLE

a seniority, training or merit increase system that does not discriminate on the basis of sex.

The single standard applies to overtime as well as straight-time wage rates, and employers will be liable for reasonable attorney's fees and costs where legal action is necessary in order to recover back pay due employees because of non-compliance with the law. The law provides penalties of \$50 to \$200 a day for the entire period of violation, or imprisonment of not less than 30 days nor more than 60 days.

SPARE FOR SAFETY

A car with its spare tire mounted in front to absorb the shock of a collision was displayed at an inventors' show in Brussels, Belgium.

Jacques Gerin of France dreamed up the idea.

THIS JOHNNY CAN'T READ

City Marshal Richard Bross of Canton, Mo., surprised a burglar with a torch, who almost succeeded in cutting through the door of an unlocked, empty safe at the Martin Chevrolet Co.

The culprit ran through a plate glass door and escaped.

A notice attached to the safe door, and cut through by the torch, stated: "This safe is not locked."

TUCKER TORPEDOED

Remember Preston Tucker and his controversial car? Although some believe he never produced a car at all, actually about 50 Tuckers were manufactured, one of which was driven from Florida to New York by Nick Jenin, owner of ten Tuckers in good running order.

The car was on display last month in Central Park. Viewers were invited to kick the tires, inspect the engine and even give it a spin.

The occasion publicized Charles T. Pearson's book, "The Indomitable Tin Goose: The True Story of Preston Tucker and His Car," which tells the story of the Tucker venture from the inside.

The Tucker has long since gone into that region where the bones of more than 2,500 American-made cars repose, unable to meet the pace demanded by the public.

Mercedes-Benz Sets Up Florida Zone Office

ESTABLISHMENT of a zone office in Jacksonville, Fla., for Mercedes-Benz and Auto Union-DKW motor vehicles, with Walter T. Swink as sales manager, has been announced by F. L. Armstrong, general sales manager for Mercedes-Benz Sales, Inc.

Headquarters for the new zone, which includes Florida, Georgia, Alabama, Louisiana, Mississippi, Arkansas, Tennessee, South Caro-

lina and part of North Carolina, are in the Collier Building, 121 East Eight St., Jacksonville 6.

Formerly a field sales manager, Swink will be assisted by N. W. McCollum as field sales manager at Jacksonville and William D. Biles in a like capacity at Memphis, Tenn. Robert G. Yoas will be transferred from the home office at South Bend to Jacksonville as zone administrative manager and car distribution manager.

M-B sales have been climbing over the Southeast.

10 reasons why MOOG MEANS MORE

1. CAR-BUOY—Corrects rear-end sag on passenger cars and station wagons without replacing good shocks. Exclusive bracket design protects shock weld.



2. TRUCK-BUOY
Exclusive hollow rubber overload spring increases payload capacity on both leaf and coil spring $\frac{1}{2}$ and $\frac{3}{4}$ ton trucks.



5. ADJUSTABLE BALL-JOINT—Another Moog first! Adjustable feature eliminates excessive ball-joint looseness, permits positive front-end alignment and lengthens tire life.

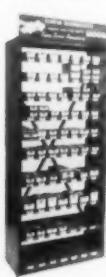


ADVERTISED IN
LIFE

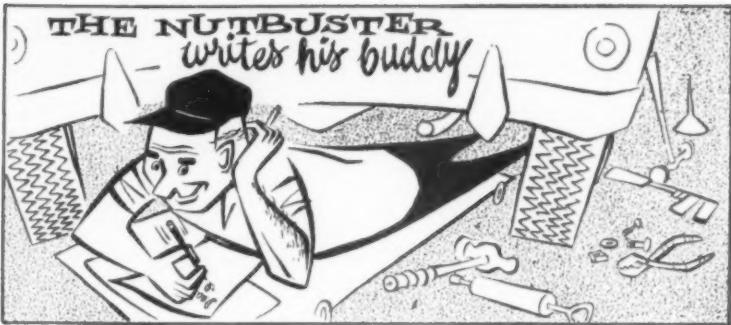
6. POWER STEERING REPAIR KITS AND HOSES—Newest and most complete line for repairing noisy, vibrating power steering mechanisms. Remember... 3 out of 4 new cars have power steering.



9. NOW ADVERTISED IN LIFE!—Six big ads during your peak spring and summer selling season create even greater consumer demand and acceptance. "Advertised in LIFE" tie-in merchandising materials available.



10. MERCHANDISING AIDS—Action-getting "point-of-purchase" material—attractive display racks, cabinets, wall signs and others—give you extra selling punch and identify you as "Under-Car Headquarters"!



UNDER-CAR BUSINESS



3. STEERING STABILIZER

Converts ordinary idler arm assemblies to smooth ball-bearing action. Eliminates front-end slack or bind for safer, more positive steering control.



4. GUSHER-BEARING

TIE ROD END—Oil-imregnated bearings actually "breathe" lubricating oil to the high friction points for longer life of the unit.



7. FOREIGN CAR PARTS

The most complete line of chassis and suspension parts for foreign cars on the market... a market that is getting bigger every day. Ask for our new catalog.



8. MOST COMPLETE

LINE—Front-End Suspension Parts • Idler Arm Kits • Coil Springs Tie Rod Ends and Drag Links • King Bolt Sets Shackle Kits and Parts Leaf Springs • Overloads Shock Absorbers • Ball Joints.

Don't lose out on profitable under-car business! Sell the line that lets you sell 'em all. Moog has the most complete catalog of parts in the under-car field. New designs being developed every day! Contact your Moog distributor or jobber and let him prove to you that MOOG MEANS MORE UNDER-CAR BUSINESS! Moog Industries, Inc., St. Louis 33, Mo.



Dear Bill,

You're right, doc. The maintenance and inventory of the shop special tools and equipment can be a real problem.

There's nothing more frustrating to a rushed mechanic than to find he can't find the tool he needs, or that the last user had loused a machine that could get his job out on time.

Many of the larger shops have pinned down this problem by establishing a tool room with a full-time attendant who handles the special tools just like the parts man handles the parts—like they were his own, that is. To draw a special tool you must hand the attendant your marker, which he hangs on the hook, and, brother, until that tool gets back on that hook, and you get your marker back, you're IT.

In some shops they have a handicapped person employed on this tool room job; in others the special tool board is kept in the parts room and the parts man doles them out, and occasionally the shop may place the tools and machines in the care of a machinist-type who not only racks up the tools and maintains the machines, but who often does much of the machine work for the mechanics, and truly pays his help.

The size and layout of the shop governs the extent to which centralization of shop equipment can be carried. If there are specialized departments, then it is usually necessary to keep the special tools and equipment for each specialty close at the hands of the mechanics working on the specialty, and then they are, of course, held responsible that their tool inventory is intact.

Without some control on the special tools it is hard to get them back in place for the next man. In some smaller shops the service manager or foreman may keep the tools on a marked board and make a fast visual check of it each night to make sure there are no gaps. Careless handling by the "wheels" is sure to lead to careless handling by the mechanics, so the fact that an interest is taken in these tools by the people who bought them tends to remind the ones who use them that they aren't mavericks.

Of course, it isn't always true, but they have a saying about tool treatment to the effect that a man's own tools are like his own chil-

dren, while the tools he borrows from his buddy are like the neighbor's kids who can stick around so long as they keep their nose clean, but that the shop's tools are those brats from across the tracks, so they'd better take care of themselves.

Schooling and training in their use have a lot to do with teaching use and respect for tools, and it is just as important to keep the ball rolling in teaching care and maintenance of tools. We've found that devoting a certain part of each

shop meeting time to discussing our tools and equipment seems to keep the guys interested in using them on their job properly, and then putting them back where they can be ready for the next job.

Can't write any more right now as I've got to find that gear puller I used for discussion in the shop meeting last night. Now Bob needs it and I forgot to hang it back on the board.

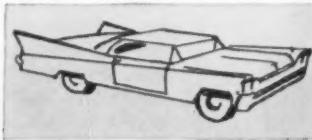
Yrs,
Ed.



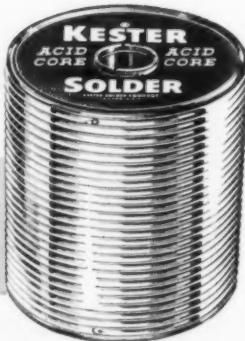
First and Foremost
with the Automotive Trade!

Kester Solder

KESTER ACID-CORE SOLDER is the time-proved favorite of the automotive service shop. Unvarying in highest quality, uniform in manufacture, always dependable . . . Kester is the perennial national "buy-word" in Solder.



SEND FOR free literature today



KESTER SOLDER COMPANY

4236 Wrightwood Ave., Chicago 39, Illinois • Newark 5, N. J. • Anaheim, Calif. • Brantford, Canada
OVER 60 YEARS' EXPERIENCE IN SOLDER AND FLUX MANUFACTURING

Why U-C Sales Are Up

(Continued from page 52)

cars, a lot must have a good display of assorted models, makes and colors in medium-priced cars from '53 through '59. We run a daily column in the newspaper for which we have a monthly contract. Daily spot radio announcements also keep the public informed of our excellent buys.

I believe an important factor in handling a used-car customer is demonstration. It is good business to let your customer drive the car around and test it out to his satisfaction. Many dealers in the area do not permit a used car to leave the lot in the customer's hands. If a customer wishes to have his own mechanic or shop check out a car before he buys, we permit him this privilege.

We set our sale price by the NADA book plus our reconditioning costs. Every used car sold carries a 30-day or 1,000-mile warranty.

Your used-car salesmen figure importantly in how good a job you can do with used cars. Dependable, experienced men who can concentrate on used cars alone without having to sell new cars usually do a better job, I am convinced. Too diversified a range handicaps a salesman with too many details that he cannot control. Our men are on straight commission.

These factors cited helped us sell 100 more used cars in '59 than in '58.

Readyng Cooling System

(Continued from page 57)

in anti-freeze are depleted by any number of possible causes like aeration of the coolant, hot spots in the head or block, or leakage of exhaust gases into the cooling system. In other words, anti-freeze in the cooling system is much like the oil in the crankcase in that it is subject to contamination from many sources, and once contaminated it is likely to do more harm than good to its system.

Therefore, in order to stave off rust and corrosion in the cooling system, the safe recommendation is to drain the anti-freeze after each winter season. If anti-freeze is recommended for a certain temperature because of an air conditioner, then add fresh anti-freeze to protect to the recommended temperature.

Anti-freeze is prone to deterior-

with **HEIN-WERNER**

**you get more
jack for
your money!**



Improved **55 PACER**
lifts 1960 model cars!

Dependable, modern-designed "55" PACER has the saddle adjustment, span and reach needed to raise either end of the vehicle a full 31" inches. Built-in proven performance features make it the ideal jack for a wide variety of service lifting. Special S-5523 adapter saddles fitting any "55" in the field with swivel saddles are available to raise the front end of 1960 Oldsmobile or Lincoln at recommended lifting points. For extra long life the "55" is powered by a rugged 3 ton jack with safety valve set at 1½ tons.



Bold New *SWIFT-LIFTS*
make speedier load contact--
lift up to 26 inches!

These outstanding new service jacks by Hein-Werner offer performance features never before available. They provide more lifting height; more contact speed; more maneuverability and operating ease; more stability. *Here today* in popular capacities to meet your lifting needs for years to come.

**New PUSHMASTER Jacks and JackKits
in popular capacities**



Save valuable time and manpower on body, fender or repair jobs with the easy, controlled pushing power of these dependable units. "Snap-in" tube connectors are also available to complete job setups in a jiffy and assure close fitting, sturdy connections.

Keep your shop up-to-date with Hein-Werner. See your Hein-Werner Jobber for facts on why it pays you to standardize on Hein-Werner, or write, wire or call us for full information.

Hein-Werner
CORPORATION
WAUKESHA, WISCONSIN

The complete Hein-Werner line includes: The famous "55" and "Screwball" . . . Under-Axle Jacks of 1½ to 100 ton capacity . . . "Bumper-Lift" and Ratchet Jacks for passenger cars . . . "Swift-Lift" Service Jacks for shop use . . . Transmission Jacks . . . Adjustable Stands . . . "Push and Pull" and "Pushmaster" jacks for body, fender and frame repair work.

ate more rapidly during hot weather summer usage, so leaving it in the system when the winter season is over is not recommended.

An apparently obvious but sometimes overlooked cause for overheating is clogging of air passages of the radiator core. The same warning given grandpa about carefully cleaning out bugs or mud or other debris in the radiator core to increase air circulation but without damaging the core still stands good on the new cars. Restricting heat transfer into the atmosphere, can cause the same serious results when the clogging is on the outside as on the inside.

As for cleaning the inside of the system, this may be done by using standard shop processes and equipment, providing it is done before serious blockage has occurred. When standard cleaning chemicals and reverse flushing procedures can't cut the muck, the specialist is given the job. By use of a flow meter test he can tell how bad the core is blocked at the start, and then check the flow again to see if his usual hot chemical vat treatment cleared all passages.

In extreme cases the tanks are

removed and the core is rodded or replaced with a new core, for the cost of the core, while plenty, is only a portion of what the overheating cost can be when the engine is damaged.

When the cooling system is repaired and ready for use, be sure a good rust inhibitor is used with the water for the summer season, or that fresh anti-freeze is installed for winter use to guard against recurrence of the blockage.

The importance of the cooling system to engine efficiency dictates that its service should not be left to the car owner or a shop brush-up man. Its history of trouble and remedy is a long one, but the mechanic who knows the story can make the fix.

We Turned **\$\$** into **\$\$**

(Continued from page 47)

a new field—paint and body work—would be advantageous economically. We thereupon opened a body and paint shop at another location.

Other changes in personnel were made in the sales department and office. Three salesmen were re-

placed, and our part-time salesmen eliminated. I took over the job of sales manager.

We also looked into our book-keeping methods and found them out-of-date. Non-essential information was recorded; duplication of effort and inefficiency characterized our office procedures. No check existed between service, parts and office departments and from time to time repair orders could not be located. There was no effective check on cash. Therefore, the three office personnel were replaced with topnotch, hard-working and well-qualified women, the best that were available, at higher - than - average wages.

It was about this time that some of the older employes began chafing under the new, tighter controls governing expense and left the company.

Other changes were advised. We raised the flat rate to body and paint employes to 50%, and revised the sales compensation plan. Formerly we paid salesmen a fixed percentage of money turned in; we changed this to a percentage of gross profit per new-car sale with a minimum of \$50 per car.

FOOL-PROOF... TROUBLE-PROOF PERFORMANCE

NEW! **SLO-CHROME**

They stand out

Compensation on used-car sales remained the same. The new plan attracted three top salesmen from competitive dealers.

During this retrenchment period the dealer's salary did not increase. Fixed expenses remained the same. We did, however, introduce an incentive program for service and parts supervisors on the basis of total customer labor and total parts sales.

We instituted other changes. Several used-car lots at various locations around town that were not operating profitably were consolidated and all display is now presented at the main building's premises. The reduction of display and facilities cut back expense considerably.

At this time we embarked upon a more extensive advertising program, doubling what had been done in '57, and by '59 trebling with newspaper, radio, direct mail and other effective means. We had spent \$4,500 on advertising in '57, and for the first 11 months of '59 spent \$13,500.

Fixed expenses remained about the same. Rent equivalent was the same even though a body shop was added, since Mr. Rickard owns



This is one of two signs erected along busy U.S. 23 by the Toccoa, Ga., unit of the Independent Garage Owners of Georgia, of which Ray Jordan is president. The garagemen constructed the signs themselves.

•

part of the facilities and leases a portion. The shop building, used-car lot and new-car storage lot are owned by the company. An item in variable expenses—commissions on new- and used-car sales—rose from \$10,700 in '57 to \$28,200

in the first 11 months of '59.

I have no doubt that many small dealerships are today in the same predicament we found ourselves in at the onset of the recession in early '58. To them I would say that a first step in pulling themselves out of the red is to get somebody with comprehensive experience in all phases of the automobile business to analyze their operation objectively and act rapidly to restore it to a healthy economic state.

Concentrating on fixed expenses, he will find that fixed expenses do not go up a great deal in a small dealership whether 20 cars are sold a month or 50. Rigid controls will have to be set up governing money that comes in and goes out. I recommend increasing advertising as much as you can afford to. And as I stated above, get the best, efficient personnel you can command and pay them top wages. Don't try to save on competent supervision.

The finance company you deal with is very important. It is best to have a legitimate, nation-wide finance company with flexible rates that can handle the credit paper of your customer, an institution that is competitive rate-wise

McQUAY-NORRIS

CHROME CONTROL

LEAK-PROOF

PISTON RINGS

NEW SLO-CHROME MEANS LONGER LIFE



SLO-CHROME—exclusive with McQUAY-NORRIS—is a special, unhurried plating process whereby dense, fine grain chrome is carefully applied to assure immediate and permanent oil control. SLO-CHROME is more expensive to produce than other types of plating, yet costs you no more. SLO-CHROME is used on all steel rails, and on top chrome rings.

SEVEN WIPING EDGES

The famous Leak-Proof piston ring set (including the outstanding "400" oil ring) has seven (count 'em) wiping edges. No other ring set has so many wiping edges to save your customers gas and oil.



Because they stand up!

and competitive in service to the customer. I mean one that can get its representative on the spot to a customer en route to California from the East, for example, who may be having car trouble midway across the country, or in a case where readjustment in payments can readily be made if there is some difficulty.

I can only repeat what I strongly advocate: the dealership in a tight spot, uncertain of the future and what to do next, can best serve its own interests by calling in a consultant at least twice a month, and within 60 days of analysis of the sales record, financial status, accounts receivable, expenses, and forthwith initiating changes, can get the ball really rolling.

We know, because it has happened right under our own roof.

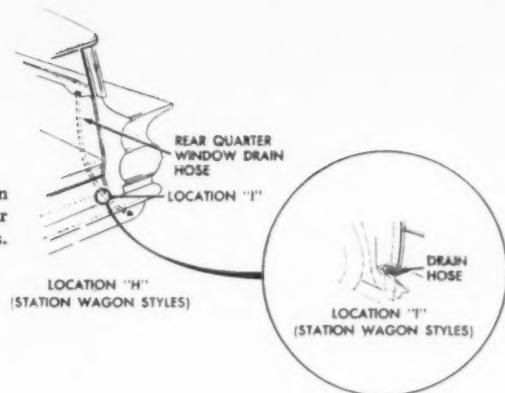
Locating Chevy Drains

(Continued from page 63)

underbody adjacent to the wheelhouse panel.

A drain hose (G) is located at each outer corner of the windshield drain gutter. The lower end of the hose is installed through the front body hinge pillar outer

Fig. 2—Rear station wagon body water drain hole locations.



panel. The lower ends of these hoses are located behind the front fenders and cannot be readily cleaned. In cases where cleaning is required, a flexible wire can be inserted into the hose from the top end.

A drain hole (H) is located at the rear lower corner of the rear quarter window of station wagons adjacent to the rear window opening pillar (Fig. 2). On the right side of nine-passenger styles, the hose is located at the lower front corner of the quarter window. The

lower end of the drain hose is installed in the rear end panel behind the bumper.

A drain hole (I) is located at the bottom of the right and left tailgate opening lock pillar on station wagons. A short drain hose is installed in each hole to prevent dust entry. The purpose of these drains is to provide drainage for water which becomes trapped behind the tailgate and body lock pillars.

(This information was contained in a recent bulletin by Chevrolet to its dealerships.)

Perfect saddle fit

McQUAY-NORRIS

“CUSTOM-CRUSH”

BEARINGS

3300 E.K.

"Permanent" Anti-Freeze Developed by Du Pont

AN ANTI-FREEZE that reportedly can be used safely year after year has been developed by E. I. du Pont de Nemours and Co.

"Telar" anti-freeze and anti-rust coolant never needs to be drained from a properly operating cooling system, according to the manufacturer. In addition to providing anti-freeze protection, it is said to maintain efficient cooling summer and winter.

Mixed with ordinary water, "Telar" is said to cost less for complete cooling system protection than special solutions which must be drained annually, although its initial cost will average more than previous anti-freezes.

Another unique feature claimed is a built-in signal called "Color Check" that warns of major cooling system breakdowns. The patented feature changes the normal red color of "Telar" to yellow if a leaky water pump, hose connection or cylinder-head gasket lets too much air or exhaust gas into the anti-freeze solution, contaminating the coolant.

Secret of the product's "stay-

ing power" is a new long-life chemical inhibitor that reportedly rustproofs the entire cooling system and protects all metal surfaces, including the latest aluminum alloys, against corrosion. It forms a thin layer of tough "chemical armor" on all corrosion-susceptible surfaces that makes them immune to the effects of oxidation and electrolysis. When added to a system where rust and corrosion have already begun, the inhibitor prevents further damage, the manufacturer said.

Memphis' Garage

(Continued from page 59)

of knowhow. The display helps to instill confidence in new customers.

The certificates and diplomas are for such courses on carburetor, automatic transmission, power brakes, tune-up, steering and automotive air-conditioning service and installations.

Walls, a veteran of nearly 30 years in automotive service, feels it is important that both he and his employees take training courses offered by manufacturers.

"You've just got to do that in



Appointment of Ronald L. Phillips as manager of the Washington (D. C.) Ford district sales office, has been announced by M. S. McLaughlin, Ford Division general sales manager. District sales manager at Richmond, Va., since 1953, Phillips replaces William P. Bave, recently named manager of the New York district sales office. Phillips, who last month celebrated his 30th anniversary with Ford, is a native of Dodge City, Kan. He attended high school and college in Memphis, Tenn., and was with Universal Credit Co. there prior to joining Ford.

order to keep up with the many changes these days," he said.

NEW!

CUSTOM-CRUSH* MEANS PERFECT SADDLE FIT, TOTAL HEAT TRANSFER



CUSTOM-CRUSH is just one of the many features that make McQuay-Norris Bearings stand out. Longer engine life, less down time are assured. CUSTOM-CRUSH means perfect saddle fit, complete heat transfer.

* THE SPECIAL MCQUAY-NORRIS CRUSH ALLOWANCE AT THE SPLIT LINES ASSURES PERFECT SADDLE FIT.

ORIGINAL PRODUCTION BEARINGS HAVE A UNIFORM AMOUNT OF CRUSH BECAUSE ALL PARTS ARE NEW. REPLACEMENT BEARINGS SHOULD HAVE A SPECIAL CRUSH AT THE SPLIT LINES TO COMPENSATE FOR SADDLE WEAR AND DISTORTION.

NEW!

McQUAY-NORRIS "Alum-lined" engine bearings are available for late model engine applications.

MORE THAN 6400 NUMBERS of all types—a bearing for every need.

How to Correct Minor Wheel Rim Leaks

AMERICAN Motors Corp. has issued the following bulletin on wheel rim air leaks:

It has been noted that wheels are being replaced due to minor air leaks. Minor wheel rim leaks can be corrected in the field through proper testing and repairs.

When a condition of this type is encountered, use a soap solution and brush and apply a coating to all possible points of leakage. First eliminate the tire carcass and valve assembly as possible points of leakage. When leakage at these points is encountered, repair to manufacturer's recommendations.

Rim leakage can occur at the following locations:

Rusty rim flange at tire bead contact area.

Correction: Remove rust with scraper and finish with wire brush or steel wool. Excessive rust may leave a pitted condition; therefore, apply an appropriate rubber cement and remount tire on rim

while rubber is still tacky.

Foreign material embedded in sealing grooves of tire bead.

Correction: Remove substance with a wire brush, apply rubber cement and remount tire on rim while still tacky.

Heavy rim weld.

Correction: A heavy rim weld which has not been dressed down properly can cause a slow leak. With the use of a file, smooth down weld stock in flange area. Apply rubber cement and remount tire on rim while still tacky.

Leaky rim rivets.

Correction: A leaky rim rivet can usually be sealed by pounding the rivet with a ball peen hammer. Use another hammer or support to back up the rivet. In addition, an application of a quick-drying paint or cement will help eliminate this condition. Do not weld or braze leaking rim.

Cracked or split wheels.

Correction: Correction of this condition should not be attempted.

Replace wheel.

Bent wheel rim flanges.

Correction: This condition, which is usually caused by adverse actions, can be straightened if not too badly bent.

Servicing Air Conditioning

(Continued from page 51)

Start the engine, and if the evaporator will now become cool, the expansion valve was frozen because of moisture in the system.

Release the refrigerant, replace the dryer-receiver assembly, check for leaks, then charge the system.

Check the system between the receiver outlet and the low-pressure service valve for restrictions by feeling all of the connections and components. Any portion that is cold to the touch or that frosts up, with the pressures as indicated here, is restricting the refrigerant flow.

Low pressure above normal, high pressure normal:

... AND ALL OTHER McQUAY-NORRIS PARTS IN THE COMPLETE LINE ALSO HAVE SPECIAL FEATURES SPECIFICALLY DESIGNED FOR REPLACEMENT USE.



Observe both pressure gauges. If the low pressure is above normal (12 to 25 pounds at 75° F.) and the high pressure is at or near normal (100 to 180 pounds at 75° F.), the expansion valve is not operating properly. This condition may cause the compressor to receive slugs of liquid and thus to be very noisy. Also, the suction side of the compressor and the crankcase and head will be colder than normal and will "frost up."

The expansion valve will allow too much liquid refrigerant to flow to the compressor if it is defective or if the temperature sensing bulb is not making close contact with the evaporator outlet pipe. Make sure that the bulb is properly clipped to the outlet pipe and properly covered. Remove the expansion valve and make an expansion valve test.

High pressure below normal, low pressure above normal:

If the two pressures are equal within 30 pounds of each other, the compressor may be defective. Repair or replace the compressor as needed.

High pressure above normal:

High compressor head pressures are caused by an overcharge of re-

frigerant, air in the system, condenser air passages clogged, a restriction between the condenser inlet and the receiver, or high surrounding air temperatures. High head pressures are generally evidenced by a noisy compressor. Bleeding the system will relieve both an overcharge of refrigerant and entrapped air.

Whenever the system has been opened three times the receiver-dryer should be replaced as a precaution against internal icing of the expansion valve.

Insufficient cooling:

Check the following:

- 1.—Sight glass (see step 2, "No Cooling—Refrigeration System").
- 2.—Clogged condenser.
- 3.—Heater, air-conditioning and ventilation controls for proper adjustment and function.
- 4.—Body opening air leakage.
- 5.—System pressures (see step 4, "No Cooling—Refrigeration System").

Intermittent cooling:

Blower system:

Check the following:

- 1.—Circuit breaker.
- 2.—Blower motor.
- 3.—Electrical circuit.

Refrigeration system:

Check the following:

- 1.—Icing thermostatic switch.
- 2.—Compressor clutch and thermostatic switch electrical circuit.
- 3.—Perform pressure test (see step 4, "No Cooling—Refrigeration System").

Motors Insurance Corp. Ups Whowell, Mansfield

GEORGE S. Whowell and Richard G.T. Mansfield have been elected executive vice presidents of Motors Insurance Corp., a subsidiary of General Motors Acceptance Corp.

Whowell will be in charge of the operations staff. He has been a director and vice president in charge of branch operations. Also elected a director, Mansfield will be in charge of the financial staff. He was formerly comptroller of Rochester Products Division.

Harrig Retires at Chevrolet

E. L. "Ernie" Harrig, manager since 1947 of Chevrolet's national service and mechanical department, will retire June 1. A mechanic at 13, Harrig joined Chevrolet in 1919.

McQUAY-NORRIS

ENGINE AND CHASSIS PARTS

EXAMPLES:

- McQuay-Norris aluminum alloy pistons have beefed-up heads to stand up under modern high compression operation, and cam-ground skirts to provide constant clearance for quiet operation and oil control.
- McQuay-Norris self-aligning tie-rods and sockets are precision made, with dual bearing surfaces and self-adjusting oil tempered internal springs.

They stand OUT because they stand UP!

McQUAY-NORRIS MANUFACTURING CO.

ST. LOUIS • TORONTO





TORQUE WRENCHES



This Mark* Guarantees:

1. Guaranteed accurate forever within 2% of maximum scale reading.
2. The only wrench that permits accurate use of adapter & extensions. Patented pivoted handle permits concentrated load position—the only way to obtain accuracy with adapters and extensions.
3. Rugged construction. Can be stored in a tool box with other tools.
4. Easy to use as any socket wrench.
5. Signalling models and direct reading styles to choose from.
6. A complete range to choose from to meet every service application.

*These are the same torque wrenches used and recommended by leading engine and equipment builders.



Valve and Clutch Spring Tester

Test new as well as used springs. Match sets of valve springs for top engine performance. Check clutch springs to prolong clutch life.

FREE

Torque Specification Book for over 130 makes and more than 1200 models of automobiles, (U.S. and foreign) trucks, tractors, outboards, motorcycles, diesel, aircraft, marine and small air cooled engines. Spark plug, wheel bearing, valve spring data and many helpful torque tips sent free upon request, write Dept. 600



TORQUE WRENCH
ADDISON • ILLINOIS

Owners and managers of Dodge truck centers from coast to coast assembled at their recent annual conference in Chicago included (l. to r.): seated, Robert D. Brenner of Harrisburg, Pa.; J. W. Hyer of Denver, Colo.; Ray Rixman of St. Louis; Ed Louthan of Lubbock, Texas; W. B. McKinstry of Minneapolis; Del Spitzer of Cleveland; Ed Kevil of Paterson, N. J., and Tom Hutton of Memphis, Tenn.; standing, Ralph Boys of Seattle, Wash.; John Veale of Pasadena, Calif.; J. R. Wilson of Jacksonville, Fla.; J. Swanton Ivy of Athens, Ga.; G. C. Dowell of Lubbock, Texas; Byrd Nosler of Sacramento, Calif.; E. J. Ronan of Philadelphia; Jos. Caskey of Detroit; I. Sidney Glick of Malden, Mass.; Walter Royal of Richmond, Va.; M. L. Lawson of Chicago; U. S. Bernabei of Bridgeville, Pa., and Bill Julian of Indianapolis.

Making Tops "Convert"

(Continued from page 67)

raise or lower the top while the car is in motion. It is advisable to raise and lower the top at least once a month to keep the top mechanism in working condition.

To raise top:

Unsnap top boot at the sides and rear and fold into storage compartment. Turn the top control switch to the left and hold in this position until header rests on windshield. Pull top down firmly on top header. Push locking handle all the way forward until safety catch engages.

Adjusting the top:

Five adjustments on each side will allow the top to be moved ahead, back and the front portion from side to side and to correct the curvature of the side rail to fit the contour of the rear quarter windows. This could also affect the clearance between cloth top and door.

Before making any top adjustments, determine the cause of the difficulty before proceeding, then

MAY IS NATIONAL SAFETY MONTH...

GET THE JOB DONE BETTER AND FASTER WITH MOPAR

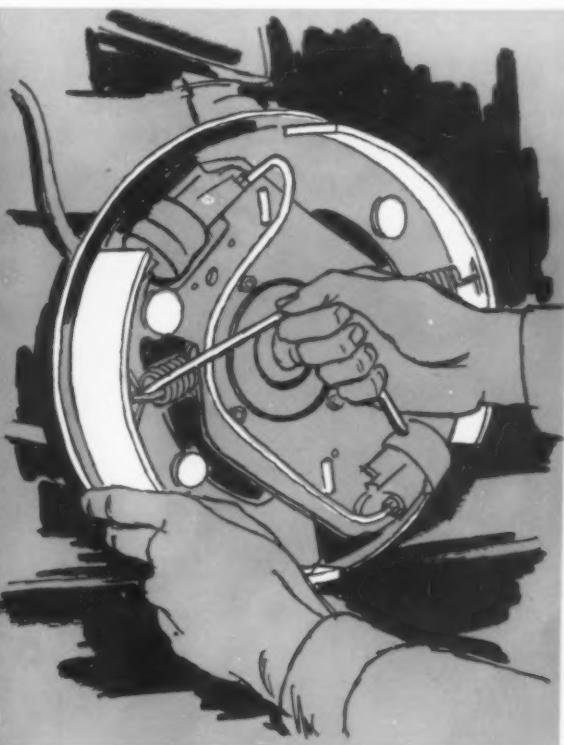
It's Safety Check time again, and the smart installer makes the most of it when he uses MoPar parts and accessories exclusively

You're ahead with MoPar because:

- MoPar replacement parts are engineered by Chrysler Corporation to fit perfectly
- A perfect fit means less installation time, more time to do more jobs
- More time and more jobs mean more profits for you

Your customers are ahead with MoPar because:

- MoPar replacement parts are exact duplicates of original Chrysler Corporation equipment
- Exact duplicates mean original equipment performance
- MoPar Safety Checks combine quality workmanship and dependable products



Right now is the time to make doubly sure you have sufficient stock to handle your Safety Checks promptly. Call your MoPar Wholesaler or your Valiant, Plymouth, Dodge, De Soto, Chrysler, Imperial and Dodge Truck Dealer.

Sell the line that keeps your customers sold on you — MoPar

refer to Fig. 4 and proceed as follows:

Roof side rail alignment:

The adjustment of front side rail and header panel to windshield is controlled by the rear control links which are fastened in the quarter panel pockets.

Leveling top can be accomplished by lowering or raising the rear control link bracket. When adjusting the rear control link, care should be taken to adjust both sides equally to maintain parallelism between header panel and

windshield frame. Before making this adjustment, loosen top header at windshield to remove tension from linkage.

Also affecting the side rail weatherstrip sealing at top of door glasses are front side rail hinge adjusting set screws and rear side rail hinge adjusting set screws. If front side rail joints are open when top is fully raised, turn side rail hinge adjusting screws counterclockwise until joints are closed. If, after making this adjustment, the clearance between door glass

and side rail is increased or decreased, adjust the rear adjusting screws to get desired clearance.

Power link adjustment:

With top and all door and quarter window glasses in raised position, carefully inspect both door and quarter glasses for proper fit to the top side rail seals and vertical seals. Adjustment for proper alignment of quarter glass-to-roof rail weatherstrip is made at the power guide link adjusting plate with top in partially raised position.

To decrease clearance between the quarter glass and roof rail weatherstrip, move the bracket forward. Move the bracket rearward to increase clearance. The adjustment should be approximately the same on both sides.

Top header panel adjustment:

On all models, if the header does not close easily on dowels, loosen the header panel-to-side rail screws and shift header panel forward or backward as required to obtain desired clearance.

Controlling Header Adjustment

The adjustment of header to windshield frame weatherstrip sealing against entry of water or air is controlled by two torsion bar adjusting screws, one on either side, accessible through slots in the under side of the header near the dowels. Turn the screws counter-clockwise to loosen or clockwise to tighten tension on the seal. Care must be taken, in making this adjustment, to avoid too great a locking or unlocking effort on the locking handle in the center of the header.

Servicing the top folding mechanism:

The electric-hydraulic top folding mechanism (Fig. 5) consists of two cylinders, a piping system, an electric motor, a pump and reservoir assembly, and a double-throw rotary switch. The wiring and motor are protected by a separate circuit breaker, as shown in Fig. 6.

The pump is a two-direction, reversing-motor type and is connected to the cylinders by flexible lines and tubing. A valve and port assembly in the reservoir directs flow of fluid in system. The motor, pump and reservoir assembly can be replaced as a unit, or electric motor can be replaced separately. The cylinders are sealed units and must be replaced as assemblies.

If difficulty is encountered in raising or lowering the top with motor running, with sufficient fluid in the reservoir and with

NEW, IMPROVED FORMULA

MAC'S

**WHITE
SIDEWALL CLEANER
with built-in pump type
SPRAYER**

**cleans
whitewalls
quickly and
easily**

**ECONOMY SIZE
FULL 16 OZ.**

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In Every Carton



MAC'S

**MAC'S SUPER GLOSS CO. INC.
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"We turn minutes into dollars by checking every belt!"



says Leon Igel, Owner, Stratford Garage, Inc.
323 West 96th Street, New York, N.Y.

"We operate a busy uptown garage, and we've learned through the years to make every motion count in order to serve our customers better. The minute or so it takes to check a customer's belt is time well spent. If he needs one, we quickly install a Gates V-Belt in a matter of minutes. If he doesn't need one, he still appreciates our thoroughness.

"Finding and installing the right belt is easy—even for our newest employee—because the Gates Dial-Finder and the Display Rack make it almost impossible to get the

wrong belt! All of our boys keep an eye out for the Gates Mystery Car—and that sure results in every belt being checked on every car, every day!"

Phone today for YOUR Gates V-Belt Display Rack. Supplied by your Gates Jobber, this attractive fixture puts the right belt for any car at your fingertips. Gates V-Belts enable you to offer the most complete coverage of cars available—including new "compacts" and foreign cars.



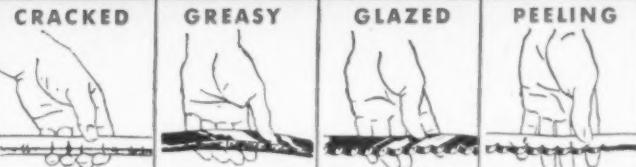
The Gates Rubber Company, Denver, Colorado
World's Largest Maker of V-Belts

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To find belt wear always turn belt over—The underside of the belt...not the top...tells the true condition of the belt.

REPLACE BELTS
LIKE THESE:



Gates Vulco V-Belts

pivot points operating freely without binding, the causes probably improper linkage alignment and adjustment.

Checking fluid level in reservoir:

Insufficient fluid in system may cause top to raise slowly or cause noise in the pump and motor during operation. Check fluid level through screw hole on top of reservoir. See Fig. 5. If low, check for a leak due to broken line or loose connection. Replace line or tighten connection as necessary. Fill reservoir until fluid runs out of filler hole. Use heavy-duty brake fluid.

After filling reservoir, raise and lower top several times to force out air that may be trapped in system. Always check fluid level when top is lowered.

Top will not raise or lower:

Hook one wire of a test lamp to a good ground and the other test wire of test lamp feed to terminal on control switch. The test lamp should light. If test lamp does not light, test on each side of circuit breaker and replace faulty wire or circuit breaker, as necessary.

Testing Top Switch

Testing the top control switch: Disconnect the black wire at top control switch and hold it firmly against black and red wire terminal on control switch. The top (if raised) should start to lower. Repeat this test with green wire. The top (in lowered position) should start to rise. If top operates during these tests, but fails to operate when control switch lever is moved to right or left, the switch is at fault and should be replaced.

If top is moved to right or left, the switch is at fault and should be replaced. If top fails to operate during these tests, follow procedure outlined for adjusting the top, checking fluid level in reservoir and testing wires between control switch and pump motor.

Testing wires between control switch and pump motor:

This test can be made from the luggage compartment. Check pump motor ground wire (black wire between pump motor and ground) to make certain it has a good, clean ground connection. Hook one wire of test lamp to black wire terminal on pump motor and ground the other wire of test lamp. Move top control lever to right. The test lamp should light.

If test lamp does not light, the black wire between pump motor

NEED ENGINE TEST EQUIPMENT?

SUN'S NEW EXCITING-

SATISFACTION



See Sun equipment demonstrated, you'll see why more professionals prefer it to any other equipment.

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FORT WAYNE: D. D. Leger

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INDIANAPOLIS: G. W. Hobbs

INDIANAPOLIS: Max Skinner

LAFAYETTE: R. E. Phillips

SOUTH BEND: C. S. Clark

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BIRMINGHAM: James C. Hart

DETROIT: W. E. Phillips

MOBILE: W. R. Marks

MONTGOMERY: J. H. Shifflett

NEW ORLEANS: C. W. Lake

SHREVEPORT: J. W. Raney

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WORCESTER: E. O. McMahon

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DETROIT: W. E. Phillips

DETROIT: E. L. Blanckenburg

DETROIT: J. B. Page

FLINT: J. E. Phillips

GRAND RAPIDS: Jack Mistretta

KALAMAZOO: Hall Jr.

KALAMAZOO: W. E. Weiler

PONTIAC: D. T. Underwood

TOLEDO: R. P. Welsh

ST. PAUL: G. W. Whitcomb

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BILLINGS: L. M. Anderson

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BLOOMINGTON: R. E. Phillips

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DULUTH: L. S. Dexter

EDEN PARK: E. A. Weiler

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ST. PAUL: G. W. Whitcomb

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KANSAS CITY: G. M. Meyer

OVERLAND PARK: G. M. Meyer

ST. JOSEPH: C. M. Branson

ST. LOUIS: R. E. Phillips

SIOUX CITY: G. W. Whitcomb

SPRINGFIELD: Louis T. Todd

TOPEKA: O. A. Shoop

WICHITA: L. E. Hartman

ILLINOIS

Chicago Sales and Service Branch

Hartford and Avondale — Newcastle 1-5000

CHICAGO: R. J. Moreau

CHICAGO: G. W. Johnson

CHICAGO: C. M. Branson

CHICAGO: P. C. O'Brien

CHICAGO: A. T. Damm

CHICAGO: J. E. Deppa

MISSOURI, ILL., KY.

St. Louis Sales and Service Branch
563 North and South Blvd. —
Parkview 5-7291

DANVILLE: L. J. Bussing Jr.

EAST ST. LOUIS: R. E. Phillips

EVANSVILLE: R. E. Burklow

HANNIBAL-QUINCY: E. D. Park

MT. PLEASANT: R. E. Phillips

PADUCAH, KY.: E. C. Shelton

PEORIA, ILL.: E. D. Park

POPULAR: G. W. Whitcomb

ROCK ISLAND: E. D. Park

ST. LOUIS: B. L. Babcock

ST. LOUIS: G. W. Whitcomb

SPRINGFIELD: J. L. Parke

GUARANTEED!



EQUIPMENT SELECTION HELP—Your Sun representative will analyze your business and your present equipment to help you determine which models best suit your needs.

PROGRAM... sets you up as never before to cash in on Engine Service

Now... only Sun gives you a program that enables you to cash in on the magic selling words of "Satisfaction Guaranteed." Your customers get it with the Expert Engine Service you perform with Sun precision equipment.

Model 510 Scope Motor Tester (left), for instance, enables you to perform *all the approved tests recommended by the A.E.A.* Just one package contains all the

units you need to spot trouble *faster*. You'll stop comebacks, increase your volume—and you'll be able to guarantee customer satisfaction.

You'll get "Satisfaction Guaranteed," too, with your Sun equipment purchase... from your Sun representative and his 5-point plan below. Only Sun can give you these extras—and only Sun gives you "Satisfaction Guaranteed."



EASY PAYMENT PLAN—Your Sun man has a tailor-made purchase plan for you. He'll be able to set you up in profitable business that will actually pay for your equipment as you use it.



DELIVERY and INSTALLATION—The same Sun man from whom you buy the equipment will expedite the delivery...then organize the installation in your shop so it's right!



EQUIPMENT TRAINING—He'll train you and your men so that you can IMMEDIATELY get the full value from your equipment. He'll provide you with all the "know-how" and technical information that will make you a real expert.



MERCHANDISING and SALES AIDS—And you get more than just equipment! Your Sun representative has exciting new merchandising programs for you. The sign pictured (at right) will be seen by millions in a full-page ad in Popular Mechanics...and soon in the POST.



This colorful poster...and national consumer advertising sells you and your services to the motoring public...tells them you're the man to see for "Expert Engine Service" with "Satisfaction Guaranteed." And new Sun magazine, "Sunrays," helps you build your business with profit-making tips.



Sun

ELECTRIC CORP.

6331 N. Avondale Avenue • Chicago 31, Illinois

Get the details now on why
you're way ahead... with Sun! □

MAIL THIS COUPON

Yes sir, I'd like to learn more about Sun's new "Satisfaction Guaranteed" program, and how it can benefit me. Send me the details. (please write name and address in margin below)



This group of garagemen and wholesalers from the West Palm Beach area met recently to form a unit of the Independent Garage Owners of Florida. That unit now has over 30 members with William E. Tyding as president. Wallace W. Hickman is vice president and Ronald R. Weber, secretary-treasurer. W. R. "Tommy" Tompson (numeral 1) of Miami is president of IGO of Florida.

Mustang Mike
Says...

LOOK Fella! THESE MUSTANG REPLACEMENT ENGINES

They're Money-makin' Whizbangs!

- Dealers net easy \$12 per shop hour profit
- Complete installation in 6 hours clears decks for another job
- Customer confidence and national acceptance thoroughly established through POST advertising

DEPENDABLE, precision-built MUSTANG REPLACEMENT ENGINES are proved big ticket, big profit items for any car dealer, garage or service station. Profit heaped on profit is assured from the sale of related parts plus liberal allowances you get on trade-ins.

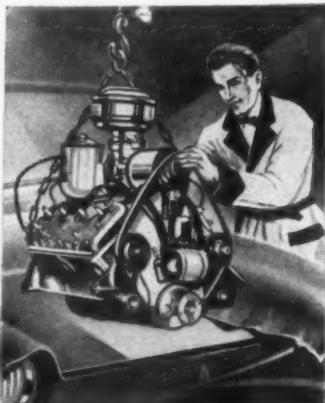
MUSTANG comes as a complete package, with all the gaskets, all ready to uncrate and install as the sweetest running engine your customers ever had. Your jobber will cheerfully explain how to "get going" with the fabulous MUSTANG volume line.



"Better built for better performance"



MUSTANG ENGINES
330 INTERNATIONAL ROAD • GARLAND, TEXAS



and control switch is defective and should be replaced. Repeat this test at green wire terminal, moving top control lever to left. If test lamp lights in both cases, but the pump motor fails to operate, replace the pump motor.

Kentucky Dealers Name Eight Directors

EIGHT district directors — four new members and four re-elected — were named last month for three-year terms by the Kentucky Automobile Dealers Association.

New members are C. E. "Bud" Brents of Lebanon, Ed Weber, Jr., of Newport, H. C. Harmon of Danville and W. E. Venters of Pikeville. Reelected were Curt Phillips of Benton, Earl Mooney of Henderson, C. F. Smith, Sr., of Louisville and C. H. Stinson of Manchester.

"Hold-over" board members are Charles B. Wilson of Paducah, C. M. Williamson of Hopkinsville, C. L. Blancett of Calhoun, Harry Holder, Jr.; Ben F. Long and Cliff F. Byrly, both of Louisville; Howard Pearce of Shelbyville, H. M. McCloy of Elizabethtown, Dallas Queen of Maysville, Robert J. Kelly of Covington, Maurice Canfield of Richmond, Fred Bryant of Lexington, J. T. Hughes of Prestonsburg, Stanley Nickell of Ashland, Robert L. Marcum of Stearns and C. Y. Blakeman of Middleboro.

GM Institute Gets Rodes

Dr. Harold P. Rodes, president of Bradley University, Peoria, Ill., has been appointed president of General Motors Institute, Flint, Mich., to succeed Guy R. Cowin at the end of the current school term in August. Cowin, head of the Institute since 1950 and a member of its faculty for 34 years, will retire.

BEAR Service Station equipment

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NEW - Opportunities for Service Stations

you'll find big money in your free new Service Station catalog!

*Features the new Portaliner... the first truly portable
BIG MONEY wheel alignment service!*

CHECK THESE OUTSTANDING ADVANTAGES:

- ✓ genuine Bear Services that enable you to check and adjust caster, camber, toe-in, turning radius and steering axis inclination on all cars and light trucks.
- ✓ you cash in on the nationally advertised Bear Sign.
- ✓ simple to use, enables you to do more jobs per day and make more profit per job. Free on-the-job training.
- ✓ increases sales of tires, gas, oil, etc.
- ✓ fills "Monday to Thursday" slack periods.
- ✓ easy to buy on low monthly payments.

GO BEAR—GO RIGHT

FREE!

New BEAR SERVICE STATION CATALOG — lists seven Portaliner Services — one to match your operation and pocketbook. Mail coupon NOW! ▶

G-887SA

BEAR MFG. CO., Dept. S-5,
Rock Island, Illinois
Rush my free copy of the new Service Station Equipment catalog.

Name _____

Address _____

City _____ Zone _____ State _____



Formula for **DEPENDABILITY**

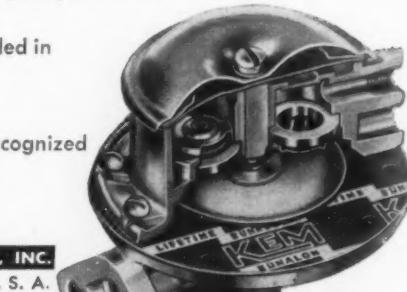
skilled hands + experienced engineering + quality material

Since 1920 the Kem formula of skilled hands, experienced engineering and quality materials has produced . . . Fuel Pumps and Ignition Parts — unequalled in performance the world over.

Kem Fuel Pumps with the "Bünalon® Diaphragm" are recognized as a symbol of dependability and quality performance.



KEM MANUFACTURING CO., INC.
FAIR LAWN, NEW JERSEY, U. S. A.
Cable Address: Kemsales, Fairlawnnewjersey



Among the new units of the Independent Garage Owners of Georgia brought into being recently in a campaign aided by the Georgia Automotive Wholesalers Association is this group at Albany. Albert Pollock is president, Henry J. Fowler is vice president and Raymond Engram is secretary-treasurer. Henry S. Clark, executive director of GAWA; Howard Hout of Keenan Auto Parts Co., Albany, a past president of GAWA, and C. D. Bedenbaugh of Atlanta, executive secretary of IGOG, aided in forming the Albany unit.

Georgia Garagemen Join State Group

GARAGEMEN of Albany, Waycross and Tifton have recently joined the Independent Garage Owners of Georgia after a campaign aided by the Georgia Automotive Wholesalers Association.

Aside from the officers of the Albany unit listed above, other officers are: Waycross—Oscar W. McGowan, Jr., president, and James E. Tatum, secretary-treasurer; Tifton—Isaac Shiflett, president; Toby Powell, vice president, and R. M. Kendrick, secretary-treasurer.

Shipman Dies in Hendersonville

M. L. Shipman, 65, former Ford dealer in Hendersonville, N. C., died recently. Shipman opened a general repair shop in 1926, operated it through 1931 and later acquired a Chrysler dealership. In 1936 he opened Shipman Motor Co., which he operated until he retired in 1953.

Atkins Dies in Columbus, Miss.

Glenn D. Atkins, owner of Columbus Motor Co. (Chrysler), Columbus, Miss., was burned to death recently when fire destroyed a residence in which he was visiting.

The Rochester-GM Service Line ...

GIVES YOU ANOTHER NEW SERVICE SALES-GETTER!

NEW OFF KAR KIT PROVIDES FAST, EFFICIENT OFF-THE-CAR CARBURETOR CLEANOUTS



The Rochester-GM Service Line adds another profit maker. It's the new Off Kar Kit, complete with everything you need for quick off-the-car carburetor cleanouts. This is just another example of the expanding sales opportunities you enjoy when you sell the Service Line that's going places fast! The Rochester-GM Service Line is designed and engineered by the world's largest manufacturer of original equipment carburetors. Order today from your nearby UMS distributor. Rochester Products Division of General Motors, Rochester, New York.



Perform overhauls or quick carburetor cleanouts with these three: Master Kits, Off Kar Kits and Kleanout Kits.



America's
number one
original equipment
carburetors

ROCHESTER CARBURETORS

Assuring Shop's Profit (Continued from page 46)

careful checkup, I believe, cuts down on comebacks.

With our five bays and four mechanics, one lift is always available for fast-turning repair jobs. In a motor overhaul or transmission overhaul, we remove the unit with a hydraulic jack to repair it at the workbench, freeing the bay for other jobs.

No bay or mechanic is idled waiting for a part. A mechanic is

put on other jobs to avoid loss of time and earnings; a bay is used productively for the next tune-up, carburetor installation, electric job or other minor repair.

Well-illuminated with six- and eight-foot fluorescent fixtures over each bay and between bays, each bay is equipped with electrical and air outlets, testing machines, repair equipment and tools pertinent to the service. A parts-washing machine placed in the center of the shop has proven a savings in cleaning fluids. Ac-

cessible to all, it is a step-saver.

One of our greatest time-savers has been the easy accessibility and maneuverability of cars into and out of the bays. Each stall has its own door right onto our 50-car parking lot.

So many shops hesitate putting on another mechanic when volume expands. Fearing that the spurt of business is temporary, the shop crowds itself with jobs, and suffers loss when it drops its customary standards and people do not return. I recommend hiring another mechanic if volume is growing.

Recognize also when an investment in equipment will keep the profits at home rather than dribbling away in subletting work. We used to spend as much as \$30 a day subletting tow work, until we invested \$1,200 in a used tow truck and crane and carried out our own towing jobs. It proved not only a savings but we stopped our indecisiveness on whether the job was worth towing, thereby adding considerably to the number of tow jobs we handle.

Vetoed Subletting

Ditto on valve-grinding jobs. We used to sublet this work, until we observed that our volume exceeded what payments on a machine would be.

Investing \$750 in a valve-grinding machine, we found it an incentive to more jobs, increased our volume by 25% and found that production could keep pace with expansion. It proved a timesaver. The same was true for our drum lathe. Giving out this work at first, we bought a lathe and now feel you cannot do a satisfactory job without one.

Parts purchasing can be handled efficiently and save money for a company. We believe in dealing with a reliable jobber whose responsible salesmen check your stock, fill in on depletions and who from time to time can furnish a good deal in spark plugs, fuel pumps, oil filters or other parts that will mean savings. Watching our buying closely, we try to avoid overbuying that will tie up capital. We discount all bills by the 7th or 8th of the month to avail ourselves of discounts.

All parts withdrawals from the parts department are accurately recorded and have to tally with repair order entries. Every job is checked against parts requisition slips and repair orders. I do not think I have to elaborate on this

The advertisement features a large black and white photograph of the Storm-Vulcan Model 60 Head and Block Milling Machine. The machine is a vertical mill with a heavy-duty base, a vertical column, and a horizontal headstock. A sign on the headstock reads "STORM-VULCAN MODEL 60 HEAD AND BLOCK MILLING MACHINE". To the right of the machine, there is a cartoon illustration of a smiling man pointing towards the machine. Below the machine, the slogan "Check the Rest Buy the Best!" is written in a stylized font. At the bottom, the company name "Storm-Vulcan" is printed.

NOW — Compare the features of S-V Model 60 with any other Head and Block Resurfacing Machine:

Minimum floor space required (34" x 47"); fastest setup of heads and blocks; rugged construction but weighs only 3200 lbs.; positive stock removal control; work capacity: 15" x 39"; cutter feed: 5 $\frac{1}{2}$ " per minute; rapid traverse... 86" per minute.

Write for Free literature on all S-V Equipment

Storm - Vulcan, Inc.

WHERE MACHINES ARE DESIGNED WITH THE OPERATOR IN MIND

2225 Burbank Street • Fleetwood 1-3735 • Dallas 35, Texas



Fred W. Adams has been promoted to sales manager of the Automotive Sales Division of American Motors Corp. as part of sales expansion program designed to meet and take advantage of rising Rambler volume, according to Roy Abernethy, vice president of automotive distribution and marketing. Director of advertising and merchandising for the past four years, Adams will continue to be responsible for those activities. His new duties include management of field sales, dealer development and retail manpower development.

aspect. All shops are familiar with abusive practices.

We are convinced that we could not have expanded at the rate we did without our radio and newspaper promotion program. Twice a week two afternoon metropolitan newspapers carry ads on our services. Five days a week, four times a day during peak traffic hours to and from work, announcements are made of our repair services. We underscore our motor overhauls and inspection and adjustment of automatic transmission.

Spending \$900 a month on promotion, we feel that radio is our better traffic puller. When we inquire of new customers how they heard of us, it is radio they mention more frequently.

Having exerted ourselves to acquire customers, we do not let them slip away easily. Nine out of ten customers are satisfied and happy; a tenth may quibble about some minor point. To keep him we'll do everything we possibly can.

Recently a customer pulled out of here satisfied with a motor overhaul we did but a day or so later returned to complain his signal lights were off. Though it had nothing to do with the motor overhaul job, we provided the needed fuse, corrected some loose wires, no charge, and sent him off pleased.

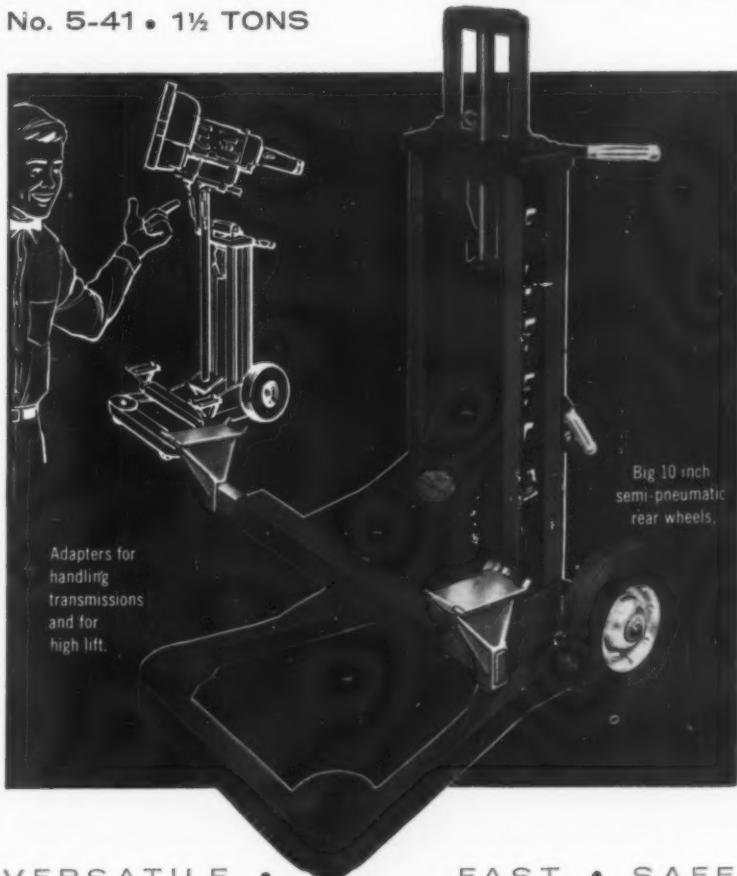
Lifting Equipment for Every Service Need

FLEET

**Hydraulic
END LIFT**

BIG 10" RUBBER WHEELS AT NO EXTRA COST!

No. 5-41 • 1½ TONS



VERSATILE •

FAST • SAFE

The handiest service jack made. FLEET Hydraulic End Lift raises front or rear of any passenger car or light truck for easy access to both wheels. Rolls smoothly to the job over any kind of surface, even broken concrete, crushed stone, etc. on big 10" semi-pneumatic rubber rear and ball bearing caster front wheels. An economical adapter lets you handle car and light truck transmissions. A quick change gives you a high lift jack for extra working room on tight under-car jobs.



Your NAPA Jobber is a Good Man to Know!
See him for the full line of Fleet lifting equipment.

**EDGEWATER
AUTOMOTIVE DIVISION**

SAINT JOSEPH, MICHIGAN

AUTO AIR CONDITIONING NEWS!

**FRIGIKING SALES
INCREASED**

38% —

**FrigiKing SALES Z-O-O-M!
DID Yours?**



AVAILABLE FOR DEALER INSTALLATION

No Need to Carry a Costly Inventory of
Factory Air Conditioned Cars!

- 1960 FRIGIKING COOLS OVER 200 MAKES AND MODELS of cars (1952 to 1960 inclusive) in matter of seconds.
- ALSO FITS THE COMPACT CARS—Comet, Corvair, Falcon, Lark, Rambler, Valiant... plus many foreign cars.
- 200 DISTRIBUTORS IN 43 STATES carry inventories for dealer installation; provide installation service if desired.

PIONEERS SINCE 1949

FRIGIKAR CORPORATION

10858 Harry Hines Blvd., Dallas 20, Texas
Phone: Fleetwood 7-6361

*Write for
LITERATURE
or to have a
REPRESENTATIVE
CALL*

- Send Literature on 1960 Frigiking
 Have Sales Representative Call

NAME _____

FIRM _____

DEALERSHIP _____

ADDRESS _____

CITY & STATE _____



Frank Schmitt has been named research engineer for Mustang Engine Division of Rebuilders, Inc., of Garland, Texas, C. A. Dunmore, executive vice president, announced. Schmitt was chief engineer for Sealed Power Corp. for 22 years, and since 1957 has been an automotive consultant and lecturer at various universities. In his present position, Schmitt will supervise factory inspections aimed at even greater quality control.

Fram Sales, Profits Rise 16 and 30%

A SALES increase of 16.74% and a 30.90% rise in profits for 1959, compared with 1958 figures, have been announced by Fram Corp.

Consolidated net sales for 1959 were \$35,355,534, compared with \$30,284,677 in 1958, President Theodore H. Belling announced. Consolidated net profit for 1959 was \$2,079,762, compared with \$1,588,831 for 1958. Per share earnings were \$2.36 last year compared with \$1.81 for 1958 based on the number of shares outstanding on Dec. 31, 1959.

In his report to stockholders Belling indicated that continued increases in sales were made by all the company's divisions.

American Motors Corp. Promotes Jeffrey

ALLEN C. Jeffrey has been promoted from assistant manager to manager of the Cincinnati zone of American Motors, covering most of Kentucky, parts of West Virginia, Virginia and Tennessee.

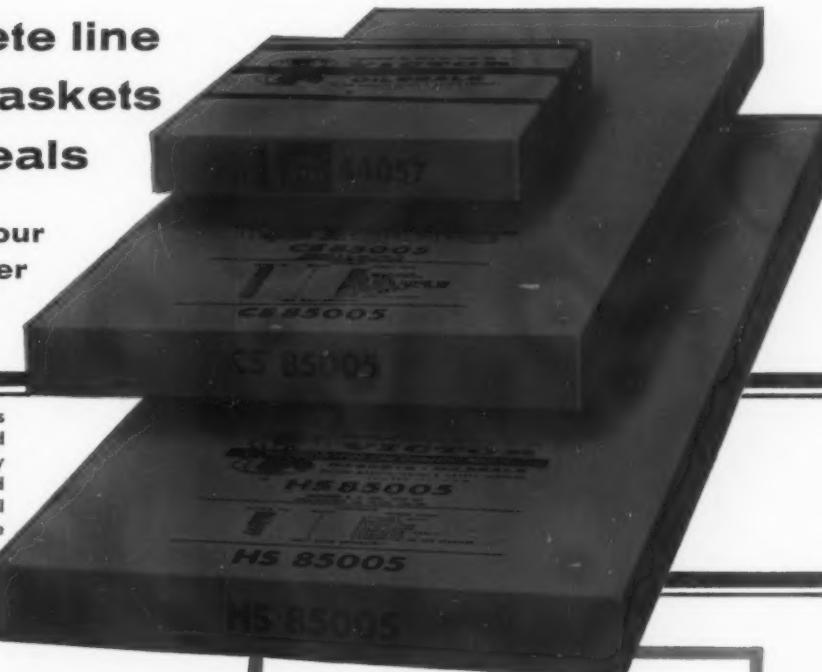
Jeffrey, who joined the corporation in 1955, succeeds W. G. Morgan, promoted to manager of the Midwestern region. Prior to 1957 when he became assistant manager of the Cincinnati zone, Jeffrey held sales management posts in Washington, D. C. and elsewhere.

NOW FOR ALL IMPORTED CARS

... a complete line
of VICTOR gaskets
and oil seals

Stocked by your
Victor Jobber

New, distinctive orange cartons
on your jobber's shelves . . . and
in your shop . . . quickly identify
Victor sealing parts for imported
cars—all the gasket sets and oil
seals you need for a complete
service job.



Now your Victor Jobber gives you off-the-shelf service on gaskets and oil seals of original equipment quality for all imported cars you service.

In these new orange Victor boxes you'll find both individual parts and complete sets of gaskets—head sets, conversion sets, manifold sets, oil pan (sump) sets and valve cover sets.

There are oil seals for front and rear hubs, pinions, crankshafts, timing covers, and other applications. The Victor line covers all popular makes and models—provides for all your replacement needs.

Victor Mfg. & Gasket Co., P.O. Box 1333,
Chicago 90. Canadian Plant: St. Thomas, Ont.

For fast, accurate ordering, use
these handy lists. There's one for
gaskets, one for oil seals—both
cover all replacement needs for
imported cars. Ask your Victor
Jobber for free copies.



Complete coverage on all these makes

Austin	Fordson	Renault
Austin-Healey	Hillman	Rover
B M W—Isetta	Humber	Simca
Borgward	Jaguar	Standard
Citroen	Karrier	Sunbeam-Talbot
Commer	Mercedes-Benz	and Sunbeam
D K W	Metropolitan	Triumph
Ferguson Tractor	M G	Vauxhall
Fiat	Morris	Volkswagen
Ford	Opel	Volvo

VICTOR

Sealing Products Exclusively

GASKETS • OIL SEALS • PACKINGS

The 100% Coverage Line . . . for Cars, Trucks, Tractors, Stationary Engines



Southland Battery Co. celebrated its 26th year of manufacturing batteries at a recent two-day sales meeting in the Hotel Adolphus in Dallas. Warehouse representatives and salesmen from ten states attended. President K. W. Pickering made the annual "Man of the Year" award to Warren C. McDonald of Dallas.

"Buy 'em by the Carton"

**Get Three
Additional
Discs **FREE!****

**"Official®
POLISHING
DISCS**

**Attention!
ALL DEALERS AND SHOPS**

**"Official" now makes available
THREE FREE polishing discs
to you with each carton
you buy. This is the time
to get in on this
"BIG THREE" Bonus Offer.**

In Constant Use Internationally, ON MAJOR AUTOMOTIVE ASSEMBLY LINES, BY NEW AND USED CAR DEALERS, PAINTERS, POLISHERS AND REFINISHERS Setting the pace in this fast-growing family of polishing discs, the "Official" All-Purpose Polishing Disc is a rugged champion, acclaimed for every polishing need. Engineered especially for today's conventional and acrylic lacquer finishes, it's made of 100% combed virgin wool permanently secured to a rugged duck back ing. Sizes 7 1/2" and 8 1/4" diameter, with 7/8" and 1/2" holes. Each disc is individually packaged in a moisture-proof, dust-proof polyethylene envelope.

Copyright 1959—Official Products Co., Inc.

Manufactured Exclusively by
OFFICIAL PRODUCTS CO., INC., 376 SPRING ST., N.W., ATLANTA 8, GA.

... Available through Your Local Automotive Jobber

ALL-PURPOSE DISC

American Motors Lifts Browder and Tracy

AN ADDITIONAL expansion move in the automotive sales department of American Motors has elevated George R. Browder and A. E. Tracy to assistant sales managers responsible for the western and eastern halves of the country, respectively.

Both will report to Fred W. Adams, recently promoted sales manager. Tracy entered the automobile industry in 1931. He joined American Motors in 1946 and most recently was eastern regional manager. Browder, who had been western regional manager since 1957, joined the company in 1949 as director of advertising and merchandising for Hudson.

Dura-Bond Co. Occupies Enlarged Facilities

DURA-BOND Bearing Co. and its affiliate, Dura-Bond Engine Parts Co., have moved into new and larger factory and office buildings at 3201 Ash St., Palo Alto, Calif., President Francis R. Burke announced.

Together with a foundry subsidiary, Sandshell Corp., the companies now occupy 55,000 square feet of floor space. The enlarged plant plus an investment of more than \$100,000 in new production and materials-handling equipment, according to a company spokesman, have increased annual capacity to 10,000,000 units.

Plexico Retires at Chevrolet

Robert S. Plexico, chief truck design engineer at Chevrolet from 1957 to 1960, has retired after more than a quarter of a century with the division. Born in Rock Hill, S. C., in 1897, Plexico graduated from Clemson College in 1919. He started in the automobile industry 43 years ago with Anderson Motor Co. and joined Chevrolet in 1934.

Six Ingredients of a Successful Shop

IN 1958 we had a 104% service absorption. Last year this was 101%. I realize this is above the average, and it has not been this high in other years. We have been able to accomplish this by carrying on a constant improvement program in our service department for many years.

What are the ingredients for a good service department?

- 1.—Good, efficient and well-trained personnel.
- 2.—Proper facilities.
- 3.—A regular direct-mail advertising program.
- 4.—Prompt handling of complaints.
- 5.—An efficient credit department.
- 6.—Genuine interest and close

Excerpts from an address prepared for delivery May 3 before the annual convention of the Texas Automotive Dealers Association at Corpus Christi.

contact by the top management.

How can you provide these ingredients for your service department?

1.—Good, efficient personnel:

Do not employ anyone without making a thorough investigation of his character and ability. We do not employ anyone who is addicted to drinking.

We require all service employees to take a physical examination. Your company doctor will do these exams for a fee of from \$3 to \$5, and it will eliminate a lot of fake injury claims and claims that were caused from injuries received prior to employment.

A good training program for mechanics is an absolute must. Most car-makers provide training films that are very instructive and are about the only means we have to train men to service the intricate components of the present-day automobile.

We hold the meetings on the third Thursday night of each month. After the training films are shown and discussed, we give cash prizes to the mechanics who have had no WDO or do-over jobs during the previous month. This costs us approximately \$60 per month, but it is a good investment in quality workmanship.

By CLIFTON DENNARD
Chrysler Dealer, Dallas, Texas

A well-qualified key personnel is the backbone of any service department.

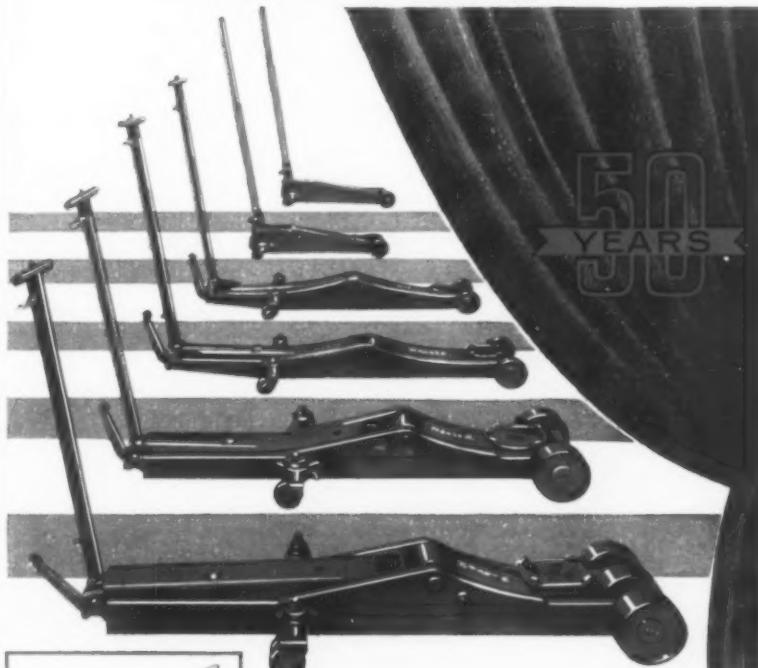
2.—Proper facilities:
The service department should

be clean and comfortable, well lighted and easy to enter.

Ample parking space should be provided for customers' cars. Nothing will cause a mechanic to do poor work more than having to move a half dozen cars, trying to move a car into the shop to perform a job. He gets aggravated and usually does a poor job.

Work Faster... Work More Efficiently

with **WEAVER[®]** Jacks



SEE THE COMPLETE FAMILY

There's a Weaver Jack with up-to-the-minute features to help you do every service job in record time and do it right. You select from a complete range of Lo-Hydraulic Jacks—1½-, 1½-ton service jacks, and 2-, 4-, 10- and 20-ton models with Quick Lift Lever. And Weaver offers hydraulic or air-operated bumper jacks, hydraulic models of rugged hydraulic hand jacks. If it's a Weaver, it's a "Workhorse." Ask your Weaver jobber or write for Bulletin SAJ 460.

WEAVER MANUFACTURING COMPANY, SPRINGFIELD, ILL., U.S.A.
DIVISION OF DURA CORPORATION

See the Display of Weaver 50th Anniversary Gold Finished Jacks at your Jobber's

COMPLETE LINE—AND NO ONE BUILDS IT BETTER THAN WEAVER
WEAVER SERVICE SHOP EQUIPMENT

50 YEARS SERVING THE AUTOMOTIVE SERVICE INDUSTRY

Complete Weaver line includes: Twin Post[®] Lifts • Triple Post Lifts[®] • Frame Type, Roll-On and Free-Wheel Single Post Lifts • Unit Lifts • Bumper Jacks • Car Washers • Wheel Alignment Equipment • Headlight Testers • Brake Testers • Wheel Balancing Equipment • Jacks • Wheel Dollies • and Air Compressors

*Registered Trademark

A separate storage area should be provided to store wrecked cars while awaiting insurance adjustments and repairs. This should be close to the body shop.

Sufficient heat in the winter and proper ventilation in the summer should be provided to keep the shop employees comfortable.

Clean and comfortable washrooms must be provided and inspected regularly. More dissension originates in the wash room than any other part of the plant.

3.—Service promotion:

We decided several years ago that direct-mail advertising was the best method for the service department. Radio, TV and newspapers have too much wasted circulation for advertising service, because only one out of three or four persons contacted by this media are potential customers for your service.

We send advertising of service specials regularly, every month, to our owners, in which we inform them of our service special for the

month. Be sure that this special lists the regular price, the special price and the amount saved. They should be timed with the seasons.

4.—Prompt handling of complaints:

I want to place special emphasis on this subject. More customer good-will is lost by neglect and improper handling, or by ignoring complaints, than any other phase of the business.

We have a specific plan for handling complaints, and I make this my own private project.

This is the plan:

1.—We mail out this card within 48 hours after the customer's work was done. This is used by numerous dealers, but it must be carried further.

2.—All of the returned cards must be returned to my office.

3.—The date, name and nature of complaint is entered on this complaint list.

4.—This complaint report form is attached to the card and is sent to the service manager.

5.—The service manager keeps the same list as I keep in my office.

Satisfy Complaint—Or Else!

6.—The complaint report and card is given to the service salesman who handled the job, with instructions to call the customer and arrange to handle the complaint. If he cannot make contact by telephone, he mails this letter. If the service salesman fails to handle the complaint, or make a satisfactory report within ten days, he is charged back with the commission on the job.

7.—After the complaint is settled, the full report and card are returned to my office, and if I am satisfied that the complaint was properly handled, it is checked off of my list and sent to our service files.

If the service salesman and the service manager cannot bring the complaint to a satisfactory conclusion, I make an effort to handle it. It is not very often that I have to do this. I recommend this plan very highly because I know, from several years' experience, this is the best good-will-builder and retainer that we have.

5.—An efficient credit department:

We require the service salesman to ask every customer if the job is going to be "cash" or "charge," and the repair order is so marked.

If the repairs are to exceed \$25, an estimate is written on the re-

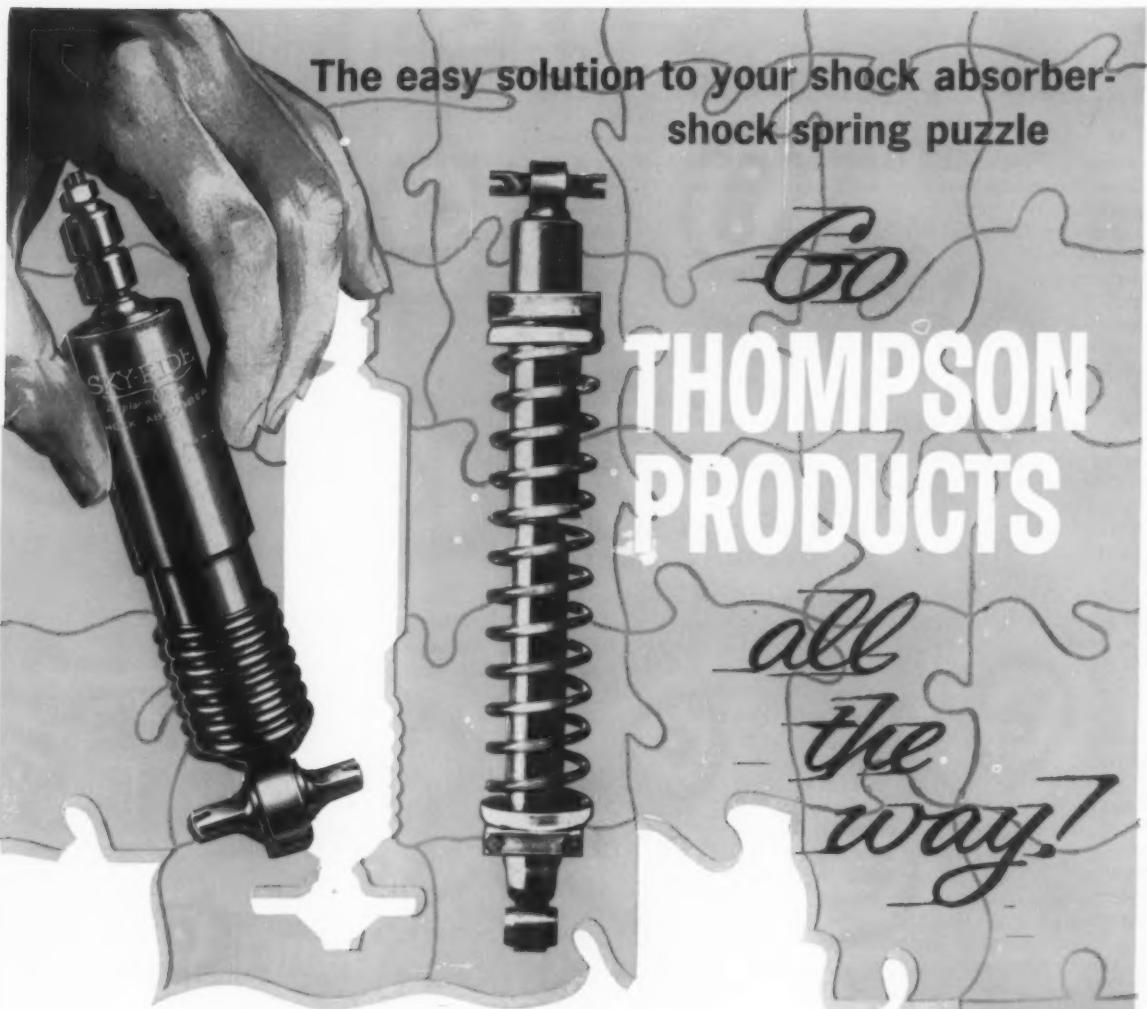
THE EXTRA POWER IN EVERY TUNGSTEN TUNE-UP KIT SCORES BIG WITH EVERYONE!



Right off the bat — TUNGSTEN Heavy-Duty TUNE-UP KITS keep your profit averages high! Each kit contains Ventilated, Pre-Set Contact Points, Condenser, Rotor and Feeler Gauge. Simple instructions tell you how to install so that there's never an error. The metal display rack is FREE and it holds 18 popular kits. Make sure you have 'em on hand for the big tune-up season ahead!

Write for catalog.

TUNGSTEN CONTACT MFG. CO., North Bergen, N. J.



The easy solution to your shock absorber-shock spring puzzle



THOMPSON PRODUCTS

*all
the
way?*

Thompson Products has solved the shock absorber-shock spring puzzle for you with the best low-cost package deal in the industry. You can now stock and install Sky-Ride shocks and shock springs as a compatible unit . . . or install the shock springs right over the car's existing shock absorbers.

Thompson Products Sky-Rides bring back new car riding comfort and steering ease. Sky-Ride's "Hydraulic Brain" construction includes:

- "Six-Way" Valving
- Sealed Piston Design
- Self-Adjusting Spring-Loaded Piston Rod Seal
- "Aeration-Free" Fluid Reserve Chamber
- Greater Oil Capacity
- Rubber Stone Shield
- All-Purpose Multi-Viscosity Fluid

Sky-Ride shock springs sold as a unit with Sky-Ride shocks cost less than competitive makes. When the spring only is installed over existing shocks—the price is but a small fraction of competitive units. What's more, Thompson Products shock springs are rubber coated for quiet operation and corrosion protection.

Talk to a Thompson Products jobber today! He's your direct line to full line chassis and front end parts.



Thompson Products

Replacement Division

Thompson Ramo Wooldridge Inc.

Cleveland 3, Ohio

Sold thru the world's finest jobbers

pair order.

A copy of the repair order marked "charge" is sent to the credit office soon after the order is written.

If the charge cannot be approved for the amount of the estimate, the credit manager calls the customer and explains in a diplomatic way why the charge cannot be approved. Do not wait until the customer calls for his car to reject the charge. It will, in most cases, make him angry and you usually lose him as a customer.

Call him as soon as possible so that he can arrange to pay cash for the job.

When accounts less than \$50 become delinquent and appear uncollectible, after regular collection procedures have been exhausted, we file a suit in the Small Claims Court, and this is very effective. Large accounts are handled in the Justice Court. If you get judgments, a surprising number will be paid.

Credit Fence Is Built

Credit limits are established and marked on all active charge accounts.

6.—Genuine interest and close contact by top management:

A successful dealer must do this even though he may become involved in some unpleasant incidents. The reward will be additional new-car sales and smoother operating service department.

Compensation:

All of our key service and parts personnel work on an incentive plan. They are paid a salary plus a percentage of the net operating profit in the service and parts departments combined.

Mechanics' compensation:

Our service charges are made on a flat rate basis as listed in the factory's flat rate manual. We do not pay our mechanics a percentage of these flat rate charges.

Formerly, there was continual griping about percentage of flat rate. If we paid 40%, they asked for 45%. If we paid 45%, they wanted 50%—and up and up.

Beginning January 1, we eliminated percentage of flat rate charges and agreed to pay the mechanic \$2 per hour based on flat rate time allowances in the manual. This simplifies time-keeping, because we keep a record of the time allowance for each job on the time sheet. At the end of the week, the time is added for a total and this is multiplied by the hourly rate.

This eliminates the necessity of computing each job separately on the mechanic's time sheet.

This is a very simple thing, but for some reason it seems to have satisfied our mechanics.

We have tried, in the past, to reason with our mechanics about percentage of flat rate, by telling them their earnings would be higher, where there was a larger amount of work at 40% flat rate than 45% flat rate, in a shop where they could not utilize their full time.

Example:

\$250 per week labor at 40% pays \$100.
\$200 per week labor at 45% pays \$90.
\$180 per week labor at 50% pays \$90.

You understand this, but the average mechanic will not accept this.

NADA Appoints Smith Convention Manager

APPOINTMENT of Leroy J. Smith as convention and exhibition manager for the National Automobile Dealers Association has been announced by James C. Moore, executive vice president.



Manager Smith

Smith will work under the supervision of Walter M. Kiplinger, executive assistant, who will reassume, in addition to his present position, the function of director of conventions and exhibitions. A long-time NADA staff member, Kiplinger has been director of conventions and exhibitions since 1955.

The next convention will be held Jan. 28-Feb. 1 at San Francisco.

DeMolet Resigns Dodge Post

John T. DeMolet has resigned as regional sales manager of Dodge Division's Syracuse, N. Y., region to become a Dodge dealer in Charleston, S. C.

INSTALL AIRTEX FUEL PUMPS

GET THESE

INSTALL AIRTEX WATER PUMPS

GET THESE

INSTALL AIRTEX POW'R-BRAKE UNITS

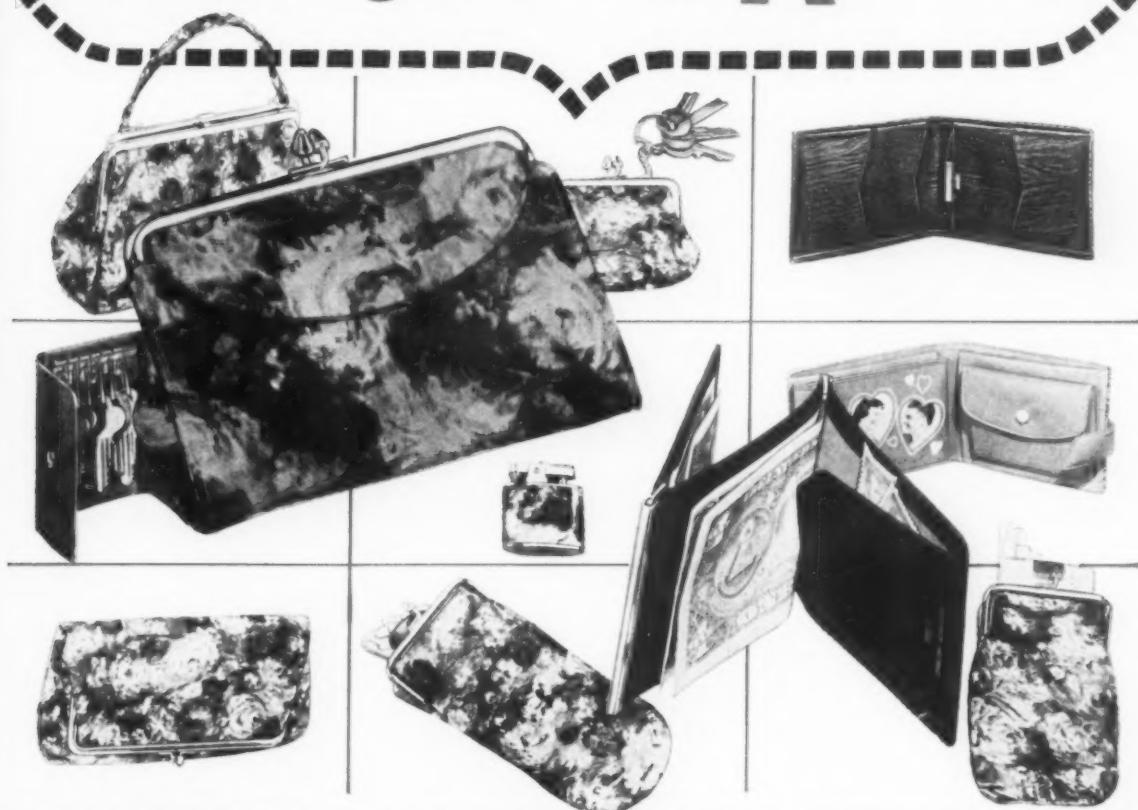
and get valuable gifts

AIRTEX

Airtex Automotive Division
AIRTEX PRODUCTS, INC.
Fairfield, Illinois

Vital products for safe, trouble-free motoring

Valuable gifts from AIRTEX



Get all of these handsome, valuable gifts with free certificates from AIRTEX

Look at all these handsome gifts for you and the "love in your life" . . . Airtex helps you get them with free certificates. Every new Airtex Fuel Pump, Water Pump and Pow'r-Brake carton includes a certificate . . . look for them . . . SAVE them! With these certificates, you're on the road to getting your choice of these wonderful gifts.

You've almost got to see these handsome accessories to appreciate their tremendous value . . . their exciting styling by Rolfs . . . their durability . . . their expert workmanship. Look closely at the Double Money Clip! It's new and different—has two compartments plus "stamp" pocket. And, take the French Purse . . . here's an item the love in your life will cherish for years to come. This, too, is new and different.

Check all the other items . . . then check your jobber for details on the new Airtex offer—a free gift plus

eight valuable certificates for other gifts with each Airtex AX-90 Fuel Pump Assortment. Only fast-moving numbers are included in the AX-90 . . . and, only enough pumps for 8 weeks of normal fuel pump service.

This is the buy—items you want but still don't often get. Call your Airtex Jobber now . . . tell him you saw this ad, clipped the certificate and now you want the AX-90 to start you on the road to obtaining these beautiful gifts.

AIRTEX
AIRTEX AUTOMOTIVE DIVISION
AIRTEX PRODUCTS, INC.
Fairfield, Illinois

Fuel Pumps • Water Pumps • Pow'r-Brake Units



NADA's Manager Is No "Solid Souther"

THREE'S a lot said about the "Solid South" in election years and Jim Moore added his two bits' worth April 25 at Biloxi, Miss.

In an address urging the importance of standing up and being counted in all elections, NADA's Executive Vice President James C.



Executive Vice President Moore

Moore, a native South Carolinian, told the annual convention of the Automobile Dealers Association of Alabama:

"The man hasn't been born who can count my vote before I cast it."

Expressing pride in being born south of the Mason and Dixon line, the attorney said, "We have been abused, we have been kicked around.

"I would rather stand up and declare my own political convictions than for a man to point me out and count my vote before an issue has been raised."

Politicians have often referred to the South as "solid" because it usually has remained in the Democratic party fold in elections.

Defective Brakes Blamed For 1.8% of Fatalities

DEFFECTIVE brakes were the cause of 1.8% of the fatal traffic accidents last year, according to the 1960 Book of Street and Highway Accident Data, published by The Travelers Insurance Companies of Hartford, Conn.

Vehicles in apparently good condition were involved in 94.8% of the traffic fatalities, while 96.6% were involved in non-fatal.

One or two lights out and punctures or blowouts were equally culpable, accounting for .4% of last year's traffic fatalities. Defective steering and taillight out

or obscured scored the same, also -2% of vehicles involved in fatalities.

Other defects in equipment accounted for 2.2% of the vehicles involved in last year's highway deaths.

Additional facts brought out in the publication, "The Dishonor Roll," were:

Of the 37,600 deaths resulting from traffic accidents in 1959 (900 more than in 1958), 15,110 oc-

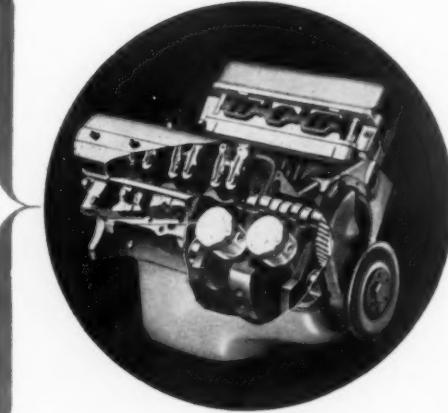
curred on weekends. Casualties from speeding totaled 914,690 and 28.7% of the drivers involved in fatal accidents were under 25 years.

More than 80% of the fatalities occurred on dry roads in clear weather and more than 85% of vehicles involved in personal injury accidents were passenger cars. Almost 3,000 of the 8,200 pedestrians killed last year met death while crossing between street or highway intersections.

INSTALL REMANUFACTURED ENGINES

OVER 200 NEW OR
RECONDITIONED PARTS
GENERALLY INSTALLED
IN EACH REMANU.
FACTURED ENGINE

- Piston
 - Piston Pins
 - Piston Rings
 - Lokar Rings
 - Push Rods
 - Main Bearings
 - Connecting Rod Bearings
 - Camshaft Bearings
 - Camshaft Seal
 - Main Bearing Oil Seats
 - Timing Gear Oil Seats
 - Valve Guide
 - Valve Springs
 - Valve Keepers and Spring Seats
 - Valve Seat Retainer
 - Valve Seats
 - Rockers And Assemblies
 - Push Rods
 - Topeets or Lifters
 - Cylinder Head Gaskets
 - Valve Cover Gaskets
 - Timing Gear (or chain)
 - Water Pump
 - Water Distribution Funnels
 - Expansion (Hoses) Funnels
 - Oil Pump Gear
 - Oil Pump Seal
 - Oil Pump (includeroller)



BIMANUFACTURING
OPERATIONS GENERALLY
PERFORMED ON
EACH ENGINE

Engine completely dismantled
Engine Block and intake
manifold completely degreased
and cleaned.
Cylinders reamed and
resurfaced.
Cylinder Heads resurfaced
and machined.
New Water Distribution
Tubes installed.
Camshaft
Camshaft研磨
Shaft journals, oil
grooves and bearing
shell bearings machined
in block.
Connecting Rod Bearings
installed.
Timing Gear, shaft and
camshaft machined and
machined.
Connecting Rods reground
and machined.
Connecting Rod Bearings
installed.
Piston Pin Bearings bored
and honed in rod
holes.
Piston Rings machined
with proper clearance.
Piston Pins fitted to
pistons.
Pistons and Rod aligned.
Ring Rings installed
on Pistons.
Valve Seats reconditioned
and machined.
Valves refaced or replaced.
Push Rods reconditioned
and machined.
Sprockets and Sprockets
machined.
New Expansion Plug
installed.
Reconditioned engine test run
at 1000 RPM.

NEW ENGINE GUARANTEE—NEW POWER—SAVE ON REPAIR BILLS—MORE MILEAGE PER GALLON

new! JUMBO-SIZE POSTER...

tells why remanufactured engines are tops in quality...how they assure peak performance. Lists all new or reconditioned parts used...lists all remanufacturing operations. It's durable, hangs anywhere...will tell and SELL for years!

Muskegon Piston Ring Company, Muskegon, Michigan

Dealers Gun for Profit, Millians Tells Alabamians

FANCHISED car dealers are out in greater numbers seeking profit, a native Georgian and finance company executive asserted last month.

Paul M. Millians, vice president of Commercial Credit Co. and a veteran speaker at dealer meetings, told the annual convention of the Automobile Dealers Association of Alabama at Biloxi:

"There are fewer worshippers at

the shrine of sheer volume. More dealers are planning positively for profit, putting profit first, and first things never stay first if you put them second.

"They are sitting down with key people, making their positive profit intentions known, developing a clear understanding of the mathematical potential for making money.

"In recent years we have seen a lot of psychological brightness in personnel relations. Many swamies, with and without turbans, have

been making suggestions for motivation, but some old-fashioned ways are being overlooked.

"Where key people participate, each department has a greater measure of respect for every other department. Personal and local victories seem less important, scattered thoughts and abilities coalesce better toward the big, main job of making money—not apart like blobs of mercury.

"Key people are more competitive-conscious," he said. "A little honest praise occasionally, perhaps to lend a helping hand to some sagging ego, sends him away to conquer new worlds. We all need occasional assurance that we are doing well."

Millians is a former Georgia businessman and a native of Newnan, Ga., just south of Atlanta.

The executive sprinkled many jokes among his talk.

International Car Show Breaks All Records

ALL sales and attendance records established at previous shows were toppled at the Fourth International Automobile Show held last month at New York's Coliseum, Show President Charles Snitow announced.

Attendance totaled 287,000 and represented an increase of 13.4% over the previous high last year, Snitow said. A sampling of 37% of the exhibitors indicated that car sales at retail prices at the show reached an all time high, he said, topping the 1959 total of \$40,000,000.

Richard E. "Dick" Krafve, former general manager of the one-time Edsel Division of Ford Motor Co., has been named president of Raytheon, which he joined a year ago after some years in the automotive industry.



Yes Sir!

My parts and labor profits have doubled since I posted this!

Get this hard-hitting poster to work in your shop and you'll see how easy it is to double your parts and labor profits, too, while you triple your shop capacity. When you "INSTALL RATHER THAN OVERHAUL," you realize twice the profits from overhauls with related sales and installation of clutches, points, plugs, etc. It takes just eight hours to install . . . compared to 2½ days for a complete major overhaul. You require less space, too, since you have fewer parts, thus enabling you to handle up to three times as many jobs. And, remanufactured engines are *guaranteed for you* by the rebuilder. Hundreds of new parts and precise rebuilding and inspection assure top performance . . . stop profit-consuming come-backs and free adjustments so prevalent with overhauls. Investigate today! Write for details on the valuable, new poster plus the fact-filled booklet, "INSTALL RATHER THAN OVERHAUL."



"**INSTALL RATHER THAN OVERHAUL**" . . . tells why remanufactured engine sales are increasing . . . tells how you can double profits, triple capacity. Write for your free copy now!





An estimated 400 service station and garage operators attended this sales clinic in New Orleans April 21, held by Maremont Muttler Division and co-sponsored by five Crescent City wholesalers—Auto Electric Brake Service, Inc., Dixie Electric and Auto Parts, Delta Automotive Distributors, Inc., New Orleans Auto Supply Co. and Greiner Auto Parts Co. J. L. "Woody" Woodhead, Southeastern sales manager, is shown driving home a sales point to the audience.

Corvair Will Produce "Dream Car" Model

DECISION to add a sporty "dream car" model to the 1960 Corvair line has been announced by Edward N. Cole, general manager of Chevrolet.

The Monza 900, scheduled to go into production this month, is a four-passenger, two-door sports coupe. Like the remainder of the Corvair line, it will be produced at the Willow Run, Kansas City and Oakland assembly plants.

Styling highlights include bucket seats in the front, all-vinyl interior and generous exterior and interior bright metal applications. Full wheel discs and backup lights will be standard equipment.

Exterior features bright moldings around the doors and rear quarter windows, rocker panels and simulated air scoops beneath the rear windows. Besides its all-vinyl finish, the interior has deep pile carpet, chrome-trimmed instrument cluster and glove box, deluxe steering wheel, rear seat ash trays as well as wishbone door handles.

Pontiac Buyers Like 'Em Cool

Installations of Pontiac's air-conditioning systems are up 52% over last year, it was announced, rising from 7.5% of sales in 1959 to 10.6% of all cars sold in the 1960-model run. Power steering installations jumped from 71% in 1959 to 81% of 1960 models, while power brakes went from 67% to 75.3%. Safari luggage carriers are up nearly 100%.

Plymouth Names Christiansen

Ronald B. Christiansen, a 34-year veteran of the automobile service field, has been named field fleet service manager of Plymouth-De Soto-Valiant Division of Chrysler Corp.

SELL AMALIE OIL!

- No Obsolescence
- Steady Turn-Over
- Effective Missionary Help

If you are now selling, or are considering selling motor oil, here are three reasons why you should take a look at Amalie.

1 Amalie oils are stable, they don't deteriorate in your stock room, and they don't go out of style.

2 Amalie Motor Oils are non-seasonal. Every day, month after month, you will sell Amalie. The income is steady, no panic seasons, no huge anticipatory stocks.

3 Skilled factory men train your salesmen, open new accounts, crack difficult accounts—develop lasting increase in your business.

Amalie is expanding—choice territories are available. Write or phone Mr. C. H. Remmel, Sales Manager.

**AMALIE DIVISION D-5 Sonneborn Chemical and Refining Corp.
FRANKLIN, PENNSYLVANIA**



Member
Pennsylvania Grade
Crude Oil Assn.
Permit # 12.

HELPFUL BOOKLETS FREE!

On this and the following pages is an excellent selection of free Automotive literature. List numbers of those desired on the coupon and mail to SOUTHERN AUTOMOTIVE JOURNAL.

102 MODEL NUMBER INTERCHANGE — Handy reference sheet with complete listing of all passenger cars 1946 through 1960 by model number interchangeably with model name. Saves look-up time by including car model data not found elsewhere. Useful as a supplement to every automotive parts catalog. Kem Mfg. Co., 20-21 Wagaraw Rd., Fair Lawn N. J.

104 VENTILATED CUSHIONS — Complete merchandising program on Kool Kooshions, including handsome wire display rack, full color catalog sheets, other advertising on complete Kool Kooshion line. Kool Kooshion Mfg. Co., Dyersburg, Tenn.

106 CAP MERCHANTISER — How to increase profits by use of radiator and gasoline cap Merchantiser. The space saving Merchantiser saves you time and money while increasing sales and profits. For detailed information. Stant Mfg. Co., 1620 Columbia Ave., Connersville, Ind.

112 SOUND SLIDE FILM—entitled "Automotive Wheel Bearings" is the first in a series of audio-visual aids designed to provide bearing salesmen, servicemen and replacement parts men with practical and useful information on various applications for ball, roller and engine bearings and on oil seals. Federal-Mogul Service, 11031 Shoemaker Ave., Detroit 13, Mich.

114 32 REASONS FOR OIL CONSUMPTION — An easy-to-use, indexed corrective manual listing 32 major oil consumption problems and remedies. Informative, illustrated, prepared by one of the top technical staffs in this field. Write —Oil Consumption Booklet, American Hammered, 2001 Sanford Street Muskegon Mich.

116 REMANUFACTURED ENGINE BROCHURE — New 6 page folder helps sell vehicle owners on the many advantages of remanufactured engines. The back provides space for the installer, the jobber, or the rebuilder to imprint his name. It provides an excellent sales aid piece for engine rebuilders and their jobbers to supply to service outlets installing engines. Muskegon Piston Ring Co., Muskegon, Mich.

118 BRAKE SERVICE GUIDE — Complete instructions for inspecting, flushing and bleeding the brake system. Handy trouble check chart. Write for Bulletin HU-411, Wagner Electric Corp., 6400 Plymouth Ave., St. Louis 14, Mo.

122 TIRE RETRUEING — An illustrated bulletin about this newest extra profit service. Describes Bear "On-A-Car" Service which makes possible tire retreading right on-the-car. Explains method using most advanced truing principle. Bear Mfg. Co., Dept. SAJ, Rock Island, Ill.

130 VALVE CATALOG — A new 168 page catalog of valves, valve guides, valve seats, valve openings and other valve components is offered by Rich Mfg. Corp., 200 Elm St., Battle Creek, Mich.

133 CATALOG NO. 56 — Features more than 300 Champ-Items automotive replacement parts for all makes of cars. A handy service book. Champ-Items, Inc., 6190 Maple Ave., St. Louis 14, Mo.

134 MOOG RINGLINER — Illustrated piston ring catalog carries listings and product information on complete line of Moog cast iron, partial chrome and Chrome Plus lines. Moog Industries, Inc., 6650 Easton Ave., St. Louis 14, Mo.

139 AIR COOLED ENGINE VALVES — A complete 8-page & cover catalog of valves for air-cooled engines and locks, first offered by any replacement valve manufacturer. Lists replacement valves for leading manufacturers of engines used for powering lawnmowers, garden tractors, mixers, conveyors, pumps, combines, industrial engines, refrigeration units. Rich Mfg. Corp., 200 Elm St., Battle Creek, Mich.

140 PRESSURIZED COOLING SYSTEM — Servicing and maintenance of the pressurized cooling system is detailed in a booklet available from Stant Mfg. Co., 1620 Columbia Ave., Connersville, Ind.

141 MOOG STREAMLINER CATALOG — Carries exploded views, detail illustrations and listings of leaf springs, main leaves, spring parts, shackles, shock links, tie rod ends, drag links, king bolts, coil springs and other coil action parts for cars and trucks. Moog Industries, Inc., 6650 Easton Ave., St. Louis 14, Mo.

142 1958 MUFFLER CATALOG SUPPLEMENT — Lists high efficiency mufflers and dual exhaust equipment for each model of 1958 cars. Grand Automotive Products, 2055 N. Ruby St., Melrose Park Ill.

144 RADIATOR SERVICING — New 32-page booklet entitled "New Blueprint for Profits" shows how any car dealer, filling station or auto repair shop may go into the radiator servicing business. It covers procedure for setting up radiator service department; shows latest compact shops, testing, cleaning and repairing units, and includes a complete price list and specification chart. It describes methods of financing, etc., which the manufacturer makes available to customers, factory training school, guarantees, etc. Inland Mfg. Co., Dept. B-138, 1108 Jackson St., Omaha 2, Neb.

148 HANDY WALL CHART — Pictures and describes the proper way to lift all 1958 cars with a one-end bumper lift jack. Blackhawk Mfg. Co., Dept. SAJ-25, Milwaukee 46, Wis.

149 TIRE & TUBE REPAIR MATERIALS — Lists in this new 12-page catalog. Gives the complete line of offered and also the stock numbers, quantity in package and the shipping weight. Ace Rubber Co., P. O. Box 6147, Dallas, Texas.

151 SERVICE JACK CATALOG — Describing complete line of service jacks from $1\frac{1}{2}$ through 20 tons. Blackhawk Mfg. Co., Dept. SAJ-SI, Milwaukee 46, Wis.

155 MAKE MORE SALES ALL OVER THE LOT — Attractive 2-color folder shows how to increase gas, oil and TBA sales and turn new customers into steadies. Pullman Vacuum Cleaner Corp., Dept. P, 25 Buick St., Boston 15, Mass.

156 BONDO PLASTIC FIBERGLASS PASTE DIRECTION FOLDER — 8 pages of easy-to-follow, how-to-do a better body repair job with this "miracle body filler that hardens like rock." Easily, quickly and conveniently applied. Bondo permanently restores surface "like new" for automotive, marine and industrial repairs of metals, wood, stone and concrete. Bondo Div., Jaycee Chemical Corp., 1104 Forest Road, Northford, Conn.

157 "PULL DOZER" CATALOG — Hydraulic and mechanical body tool catalog describing the new revolutionary method of pulling out body damage from exact point of impact. Blackhawk Mfg. Co., Dept. SAJ-pd., Milwaukee, Wis.

160 SUGGESTED SHOP PRICES ON MACHINE SHOP OPERATIONS — A 24-page booklet giving suggested shop prices on everything from align bore blocks to valve jobs. Prices represent average price gathered from jobbers in U. S. and Canada. Van Norman Automotive Equipment Co., 3640 Main St., Springfield 7, Mass.

161 COMPLETE REBUILT LINE — A 122-page catalog covering a complete line of top quality rebuilt products for automotive and tractor units is now available to both present and prospective users of the Kimco line. For all information write Kimco Auto Products, 1520 Texas St., Memphis, Tenn.

162 BONDO SERVICE BOOKLET — ILLUSTRATED — Described in complete detail application and uses of plastic-fiberglass filler for the auto body repair—showing different types of repair work and advantages and how to save time on body work. Bondo Div., Jaycee Chemical Corp., Northford, Conn.

163 TIRE TOOL CATALOG — Sheets show you the complete Ken Tool line giving specifications for each. Includes explanation of how and where each tool should be used to most profitable advantage. Ken Tool Mfg. Co., 768 E. North St., Akron, Ohio.

164 AIRTEX FUEL PUMPS — New and reliable fuel pumps. Catalog AX-70. Airtex Automotive Div., Inc., Fairfield, Ill.

166 CYLINDER HEAD STOCK REMOVAL AL CHART — A handy pocket size showing year and model of car, standard compression and the amount of cylinder head stock removal necessary to attain the increased ratio. Storm-Vulcan, Inc., 2225 Burbank St., Dallas 35, Texas.

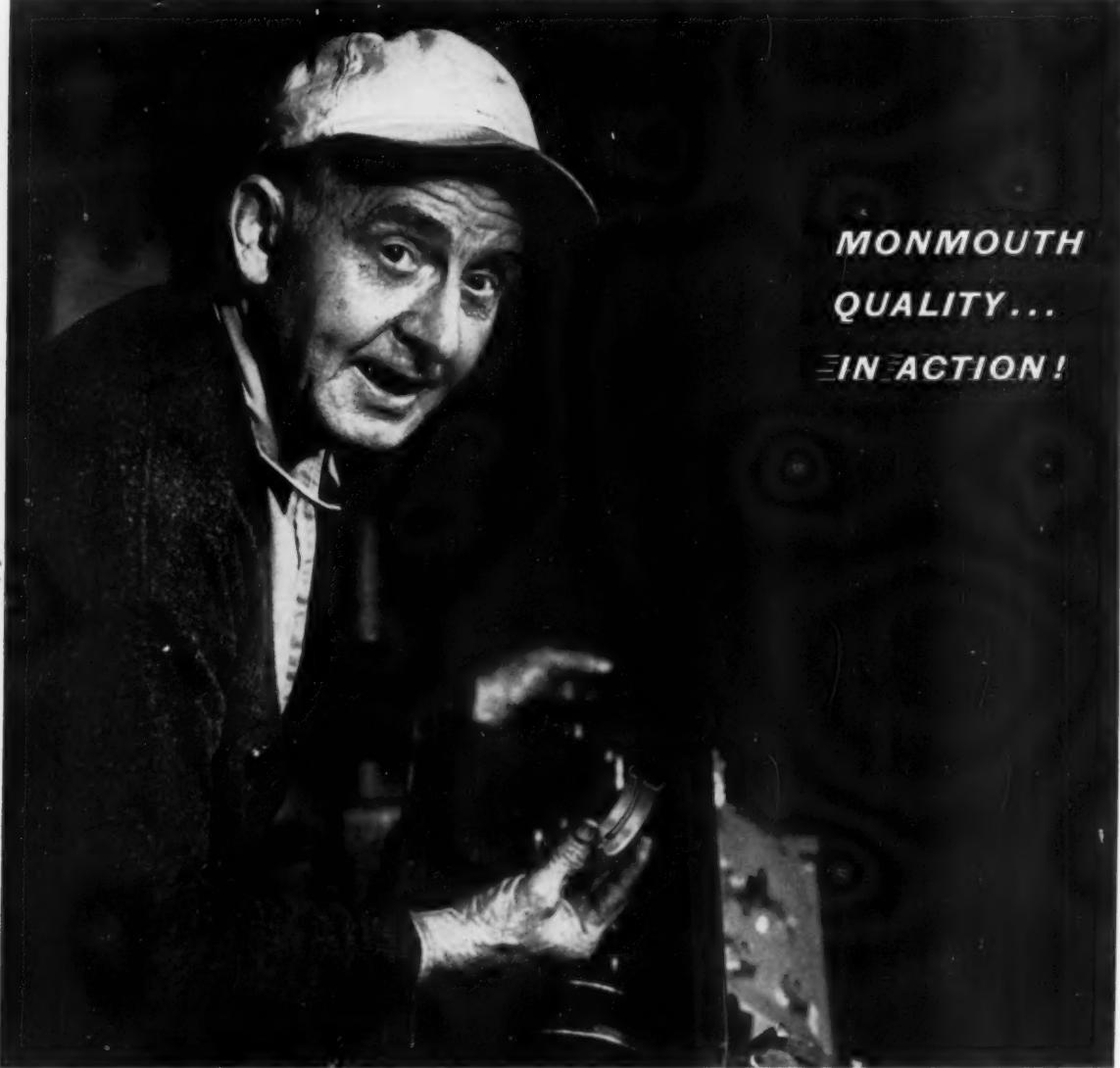
168 CRANKSHAFT GRINDER MANUAL — A colorful 8-page manual containing engineering, construction and operation details of the new Storm-Vulcan model 15-A Crankshaft Grinder. It is well illustrated for easy understanding, and describes fully the special features and advantages of the new 15-A Crankshaft Grinder designed for fast production and precision. Storm-Vulcan, Inc., 2225 Burbank St., Dallas 35, Texas.

169 YOUR ANSWER TO VAPOR LOCK — New technical bulletin deals with vapor lock and hot-motor re-starts and explains how Filt-O-Reg helps prevent these conditions and increase engine efficiency. Alondra Sales, Inc., 959 Crenshaw Blvd., Los Angeles 19, Calif.

172 A-1919 FUEL PUMP SHOP MANUAL — Contains the operation, testing, repair, installation and removal of fuel and vacuum pumps. D. Dwyer, AC Spark Plug Div., Flint 2, Mich.

173 HYDRAULIC PARTS — Complete master catalog of the complete line of Els hydraulic parts. Lists and illustrates the complete line of repair kits, hoses, stop-light switches, brake-master and wheel assemblies. Information complete up to 1957. Els Automotive Corp., Middle-town, Conn.

179 A-2446 CHART — (In full color) Illustrating "What Your Spark Plugs Can Tell You About Your Engine." —D. Dwyer, AC Spark Plug Div., Flint 2, Mich.



**MONMOUTH
QUALITY...
IN ACTION!**

"Monmouth has always meant quality..."

... and in actual performance, this quality really pays off. I know because I always used them in my own stock cars that I raced. As a garage owner and engine rebuilder for 28 years, I've long since learned to rely on Monmouth for top quality engine bearings. What's more, my NAPA jobber makes it easy for me to use the best. He carries the complete line and gives me fast service."

If you want "performance that pays off," use Monmouth Bearings in all of your engine rebuilds. Your nearby NAPA jobber can give you instant service on your complete bearing requirements.

Low premium "customer insurance" is yours when you install . . .

MONMOUTH Engine Bearings

CLEVITE SERVICE: Cleveland Graphite Bronze • Division of Clevite Corporation • Cleveland 3, Ohio

says Clifton L. Taylor, independent garage owner of Delmar, Delaware



INFORMATION CENTER



BOOKLETS • NEW PRODUCTS • ADVERTISEMENTS

**Help yourself to free literature
and more details on any product
mentioned in this issue.**

Instead of writing a dozen different manufacturers for free literature and more information on parts, equipment, accessories or services, just insert the appropriate key numbers of the New Product or Booklet listings in which you are interested. For more information on advertisements, just indicate the page number on which it appears.

Be sure to print or write legibly your name and address—drop it in the nearest mail box and

SAJ pays the postage!

(This card not valid after 90 days).

MAY 1960

Send me these FREE Catalogs and Bulletins . . . Fill in numbers

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I want details on these New Products . . . Fill in numbers

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Send more information on following advertisements

(List page No. Also company name if more than one ad on page)

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My Name Position

Company Name

Type of Business

Street

City Zone State

MAY 1960

Send me these FREE Catalogs and Bulletins . . . Fill in numbers

<input type="text"/>									
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I want details on these New Products . . . Fill in numbers

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Send more information on following advertisements

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My Name Position

Company Name

Type of Business

Street

City Zone State

These cards
can help
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HELPFUL BOOKLETS FREE!

180 THE LAMSON NO. 56-A AUTOMOTIVE CATALOG—Completely revised, illustrated reference book of fasteners used daily by automotive maintenance men including Plated Cap Screws and Nuts—Brass Nuts, Expansion Plugs, Assortments, Brake Lining Fasteners, Bumper Bolts, Tapping Screws, Flat and Lock Washers, Truck Wheel Studs, Stove Bolts, Cotter Pins and many other items. List prices, dimensions and carton quantities are given. Lamson & Sessions Co., 5000 Tiedeman Rd., Cleveland 9, Ohio.

183 BADGE-O-RAMA PROFIT KIT—83-piece profit kit of eye-catching badges, a different one for each week of the year given free with Pullman Vacmobile. Pinned to attendant's shirt these silent salesmen promote seasonal TBA items at customer's eye level. For sample badge and full information write Pullman Vacuum Cleaner Corp., 25 Buick St., Boston, Mass., Dept. SAJ.

185 SERVICE ENGINEERING BROCHURE—A new brochure comprised of 14 Service Engineering articles covering oil consumption problems, ring problems, oil control problems peculiar to the modern high compression-high vacuum engines, piston and piston ring nomenclature and several articles on scuffed rings and how to avoid scuffing and scoring. Perfect Circle Corp., Hagerstown, Ind.

186 FILTER CATALOG—Offers details on complete line of oil, air, fuel and cooling system filters. Lee Filter Corp., 43 River Road, N. Arlington, N.J.

188 ELECTRICAL TUNE-UP TESTING EQUIPMENT CATALOG NO. 100 DB—Gives full information on each testing equipment item in the entire Herbrand line. Includes details on such items as Power Timing Light, Compression Gauges, Neon Tube Timing Lights, Tachometers and others. Herbrand Div., Fremont, Ohio.

191 1959 REBUILT AUTO PARTS CATALOG—The first complete catalog to be published this year is now being distributed to jobbers and distributors. It contains listings of the 16 different items that Kimco rebuilds. For quick and easy use, the parts are arranged in logical sequence and broken down as to make and model of automobile, truck and tractor. Kimco Auto Products, Inc., 1520 Texas St., Memphis, Tenn.

194 TWIN POST LIFT WHEEL ALIGNMENT OUTFIT—Illustrated 8-page catalog, shows how this equipment does not limit floor space, shows how anyone can do wheel alignment and points out fast reading advantages. Weaver Mfg. Co., Springfield, Ill.

195 1958 SALES "PORTFOLIO"—Contains catalog sheets on YANKEE'S new "Duet Series" Mirrors, Boat Trailer Lamps and Water Ski Mirror, All-Chrome Truck Mirrors, mirrors for foreign and sports cars, and other service items. Kalamazoo punched for filing. Yankee Metal Products Corp., Norwalk, Conn.

198 SERVICE JACK CATALOG PAGE—Model WA-66, 1½-ton and 1½-ton weight of these models makes them ideal for road service trucks and away from shop service. Includes complete specifications. Weaver Mfg. Co., Springfield, Ill.

200 FREE WHEEL LIFTS AND ROLL ON LIFTS CATALOG PAGES—Two pages gives dimensions, capacity and other pertinent information about these two Weaver products. Weaver Mfg. Co., Springfield, Ill.

202 "DON'T BLAME THE GENERATOR"—Free booklet designed to help keep your profit by eliminating

costly comebacks. Arrow Armatures Co., 11 Fordham Rd., Boston 34, Mass.

204 OFFICIAL POLISHING DISCS—New colorful price sheets for wholesalers and dealers giving full particulars on three types of discs now available. Send for your copy now. Official Products Co., Inc., 376 Spring St. N.W., Atlanta 8, Ga.

207 1957 BRAKE SHOE CATALOG—With illustrations of brake shoes and their proper application, etc. National Brake Block Corp., 37-17 57th St., Woodside 77, N.Y.

208 SAFE PARTS CLEANING FOR CRITICAL PARTS—Booklet describes 3 safe ways to clean parts—pump driven filtered hose; air agitated soaking tank; and jet air gun. Practical Mfg. Co., 2840 4th Avenue S., Minneapolis, Minn.

214 THE WHYS AND HOWS OF VOLTAGE REGULATORS—Explains in simple language, every detail of Voltage Regulators—how they work, why they are important, how to adjust and service them. In 16-page handy pocket size edition, with many working drawings to clarify and illustrate the text. Standard Motor Products, Inc., 37-18 Northern Blvd., Long Island City 1, N.Y.

215 LAHER CATALOG PAGE—Both sides feature passenger car overloads and booster springs. Includes specifications and price. Laher Spring & Tire Corp., 300 Madison Ave., Memphis, Tenn.

220 1955 LASCO BRAKE SHOE APPLICATION CATALOG—Complete listing of brake shoe number, F.M.S.I. number, year, make and model of automobile. Available upon request. Laher Spring & Tire Corp., 300 Madison Ave., Memphis, Tenn.

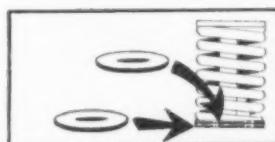
Every Car Manufacturer Advises: "Measure VALVE SPRING TENSION ... DON'T GUESS!!"



Only the Houser GAUGE KIT

No. 665 KIT

Shows Exact Number of Shims Needed to Restore Valve Spring Tension and Height to Exact Original Specifications



No. 665 POCKET GAUGE KIT

2 LIFETIME STEEL GAUGES,
easy-reference GAUGE SELECTOR CHART, covering all popular cars and trucks. Free Supplements will keep gauges up to date.

STOP GUESSING on Valve Spring tension adjustments! Measure the precise amount of metal lost in grinding or everyday engine wear . . . then replace the exact amount in Houser Shims. Guessing is dangerous . . . it can cause bent push rods, excessive cam shaft wear, damage to valves, loss of compression, speed and power.

NEW HOUSER GAUGE KIT instantly shows exact shims to use—takes only 5 minutes for a complete, 100% accurate job. No need to dis-assemble.

Contact Your Jobber or Write Direct



HOUSER ENGINEERING & MFG., INC.
BLUFFTON, INDIANA

**HELPFUL
BOOKLETS
FREE!**

223 DEGREASING EQUIPMENT AND CLEANING COMPOUNDS—Full information included in our catalog sheets for every automotive or industrial usage. Practical Mfg. Co., 2840 4th Ave. S., Minneapolis, Minn.

225 THE "CAMEL COOLIE" VENTILATED SPRING CUSHION four-color catalog page is now available. This newest product is hailed by the industry as a welcome addition to the Camel Line. H. B. Eagan Mfg. Co., Muskogee, Okla.

226 OIL LEAK DETECTOR—Bulletin shows how hooking up the bearing oil leak detector reveals engine conditions, uncovers main, rod or cam bearing wear, plugged oilways, starved bearings, before tearing down the engine. Also describes how the detector checks the completed overhaul and pre-lubricates moving parts before turning over the engine. Illustrates two sizes with maintained oil pressure—one for cars, one for larger truck engines. Federal-Mogul Service, 11031 Shoemaker, Detroit 13, Mich.

227 PROFITABLE ENGINE REPAIR—6 pages entitled "Profit Pak" shows how to get started profitably and at low investment cost in engine repair service; how to equip to make 17 essential A.E.A. tests, etc. Sun Electric Corp., Dept. PB, 6331 N. Avondale Ave., Chicago 31, Ill.

230 SIOUX TOOLS—New Catalog No. 58. Sixty pages. New items include Air Impact Wrenches, Air Screwdrivers, Valve Cleaners, All-Angle Drill Kit, Electric Screwdriver sets, and Pelican Nut Accumulators for use with impact wrenches. Also complete information on Valve Face Grinding Machines, Valve Seat Grinders, Electric Drills, Hole Saws, Electric Bench and Portable Grinders, Wire Wheel Brushes, Flexible Shaft Machines, Electric Sanders, Abrasive Discs, Electric Polishers, Electric Impact Wrenches, Electric Saws and Flat Sanders. Albertson & Company, Inc., 3100 Lowell Avenue, Sioux City 2, Iowa.

233 THE TRUTH ABOUT TUBELESS TIRE REPAIR—Booklet based on 200,000 actual on-the-road test miles. Explains in detail the things that happen to a tubeless tire when it is punctured and describes the only safe, sure method of repair. By reading this booklet and making the repairs as described in it, you can guarantee that your patch will last the life of the tire. H. B. Eagan Mfg. Co., P. O. Box 1406, Muskogee, Okla.

240 BATTERY SELLING AND SERVICING EQUIPMENT—Attractive 8-page brochure in full color gives the complete line of chargers, testers and accessories. Includes all specifications. Fox Products Co., 4720 N. 18th St., Philadelphia 41, Pa.

242 AUTOMOTIVE LINES—4-page booklet lists all of the Solder Seal chemical tools, giving part numbers, size, case contents, list and dealer prices. Radiator Specialty Co., 1400 W. Independence Blvd., Charlotte 8, N. C.

243 HOW TO SELL MORE OIL, OIL FILTERS, LUBRICATIONS & TBA ITEMS—12-page illustrated booklet gives profitable tips on increasing your sales and making every customer a happy customer. Pullman Vacuum Cleaner Corp., 25 Buick St., Boston 15, Mass.

244 SPARK PLUG INSPECTION CHART—Form No. M-1433—A full color chart that can be tacked or taped up onto walls showing both normal and abnormal appearance of spark plugs plus tips on how to get top performance from spark plugs. The Electric Auto-Lite Co., Toledo, Ohio.

251 NEW EATON CAP CATALOG—Illustrating and describing Eaton radiator pressure caps, fuel tank caps, locking gas caps, oil filter caps and the new Eaton cap and cooling system tester. Also catalog-sheet showing special cap combination offers, and new Eaton cap

merchandiser display rack which acts as an "automatic cap salesman" and saves time in checking inventory and ordering fastest moving items. Eaton Mfg. Co., Stamping Div., 17877 St. Clair Ave., Cleveland 10, Ohio.

255 TOOL CATALOG "W"—112 pages gives pictures, description and specifications of the complete Snap-On Tool line of merchandise. Snap-On Tools Corp., Kenosha, Wis.

257 RUBBER PRODUCTS—A condensed catalog designed for parts reference work just released. It contains handy simplified identification and illustrations of floor mats, pedal pads, motor mounts, and rubber bushings. Doan Mfg. Co., 1725 London Road, Cleveland 12, Ohio.

262 OIL FILTER SELLING AIDS—Wix-O-Matic, the guide to extra profits in oil filter service sales. A revolutionary merchandising concept featuring minimum, controlled inventory, guaranteed sales, perpetual stock control, Dial-O-Matic cartridge selector, cartridge installation charge guide, dealer franchise, plus choice of two eye-catching, money making merchandisers—floor cabinet or wall rack. Ask for brochure giving complete details. Wix Corp., Gastonia, N. C.

263 "WHAT'S UNDER THE HOOD?"—24-page illustrated booklet names and locates all the components under the hood of average car. Tells what each is, what it does and what attention the motorist should give it. Written with realization of importance of women as primary buyers of automotive maintenance. Wix Corporation, Gastonia, N. C.

264 TIRE VALVES, EQUIPMENT AND TOOLS—Complete jobber catalog describes the entire line; giving numbers, description, packaging and weight of each item. Acme Air Appliance Co., Inc., 205 Newman St., Hackensack, N. J.

265 TIRE VALVE WALL CHART—Comparison chart shows application of tubeless tire valves by car name. Also shows the interchange stock numbers of other manufacturers. Acme Air Appliance Co., Inc., 205 Newman St., Hackensack, N. J.

269 IGNITION PARTS MERCHANDISING—New—16-page illustrated manual describes and pictures complete new line of Merchandisers, their purpose and value to all types of ignition repair shops. Guarantees results through easy to read, up-to-date cataloging, backed up by reliable information and accurate specifications to take "guess work" out of ignition business. Guaranteed Parts Co., Inc., Seneca Falls, N. Y.

270 1960 TUBELESS TIRE VALVE WALL CHART—Measuring 19" x 25", the free chart lists 67 models of 18 major American cars, with their corresponding wheel size; tire size; manufacturers' recommended tire pressures, both front and rear; plus complete recommended valve information both for 1960 models as well as earlier model cars. It also gives comparable information for 28 models of 12 popular foreign make cars. The Dill Mfg. Co., 700 E. 82nd St., Cleveland 3, Ohio.

307 TIRE REPAIR MATERIALS, AUTO MATS, AND AUTOMOTIVE RUBBER PRODUCTS—New complete 24-page catalog covering Monkey Grip Products for the Automotive Trade. Colorful, illustrated and informative. Monkey Grip Sales Co., P. O. Box 6170, Dallas 22, Texas.

309 ACILLOSCOPE AND TUNE UP MANUAL—A new manual explaining operation of AC's new ACilloscope spark plug tester and giving instructions for easy and accurate engine tune-up work. The 44-page manual contains more than 100 illustrations and is divided into five sections for easy reference. Advertising Dept., AC Spark Plug Div., 1300 N. Dort Highway, Flint 2, Mich.

311 TUNE UP SPECS—8-page booklet containing latest 1959 ignition tune up specifications for trucks, small engines and tractors is being offered free by Standard Motor Products, Inc., 37-18 Northern Blvd., Long Island City 1, N. Y.

314 WAGNER BRAKE PARTS CATALOG—A handy ONE-POINT reference to fast-moving brake parts and lining, covering popular models of cars and

trucks. Catalog also lists complete stock of shoe exchange sets, as well as CoMax bonded lining segments available to those interested in bonding lining in their own shops. Wagner Electric Corporation, 6362 Plymouth Avenue, St. Louis 14, Missouri.

316 20,000 VOLTS UNDER THE HOOD—Covers the basic operation of the electrical units in the ignition circuit. It shows how battery voltage is built up to 20,000 volts at the spark plug. Delco-Remy Division, Anderson, Ind.

317 THE CRANKING CIRCUIT—This shows the units in the cranking circuit and how they operate together as a team to crank the modern automobile. Written in simple non-technical terms so it can be easily understood. Delco-Remy Division, Anderson, Ind.

318 NEW BATTERY SERVICING EQUIPMENT CATALOG—This catalog designated Bulletin A-39 illustrates the "New Look" which is featured in the Christie fast battery chargers. Also described is a complete new line of "Handee Chargers" for home, farm, marine, and industrial users. Christie Electric Corp., 3410 W. 67th St., Los Angeles 43, Calif.

319 BRAKE AND SHOCK CATALOG—20-page catalog and price list of Girling brakes and shock absorbers for imported cars. Covers popular models from 1948-1959. Includes brake and clutch supply tanks, lined brake shoes, brake pads, service kits, disc brakes and shock absorbers. Lucas Electrical Services, Inc., 501 W. 42nd St., New York 36, N. Y.

320 NEW DEALER CATALOG OF MOTOR REBUILDING EQUIPMENT—Features the complete Storm-Vulcan jobber line of engine rebuilding machines. Attractively printed in two colors, punched and slotted for inclusion in jobber salesman's catalogs. Storm-Vulcan, Inc., 2228 Burbank St., Dallas 35, Texas.

321 TRI-CON HOSE NOZZLE—Descriptive literature and price list on famous Tri-Con Hose Nozzle. Product has been used by industry, car wash, and home owners for over a quarter of a century. Molded Specialties, Inc., 19801 St. Clair Ave., Cleveland 19, Ohio.

322 SKY-RIDE SHOCK ABSORBER MANUAL—12 pages covering market potential, trouble shooting, engineering, installation, specifications, procedures and merchandising plans of the Thompson Sky-Ride Shock Absorber. Sales Order Dept., Thompson Products Replacement Div., Thompson Ramo Wooldridge, Inc., 6402 Cedar Ave., Cleveland 3, Ohio.

324 DIFFERENTIAL LUBRICATION—Bulletins Nos. 15 and 17 discuss mechanical aspects of the differential and need for special gear lubricants. Also describes various designations given to differentials by auto manufacturers. L. Sonnenborn Sons, Inc., 300 Park Ave., South, New York 10, N. Y.

325 POWER STEERING REPAIR KIT CATALOG—Introduces Everhot's new line of KWICKY POWER STEERING REPAIR KITS. KITS contain all the parts necessary for efficient service of all GM, Ford, Chrysler, American Motors and Studebaker-Packard models, 1952 through 1960. Easy-to-follow instructions and exploded illustrations in every KIT. New catalog contains complete alphabetical listings by car make, model and year; listings by KWICKY KIT number; Interchange Data, and Exploded Illustrations. Ask for Catalog PK-260. Everhot Products Co., 2001 W. Carroll Ave., Chicago 12, Ill.

334 TIRE VALVES, PARTS & ACCESSORIES CATALOG—New 24-page dealer catalog, No. 14, illustrates and describes complete line of tire valves, parts and accessories. Included with each catalog is latest tubeless tire valve application chart indicating the proper valves to be used with any model of American and popular foreign make cars. Operating information, specifications, ordering, and packaging information are given for each applicable product. Dill Mfg. Co., 700 E. 82nd St., Cleveland 3, Ohio.

345 HYDRAULIC BRAKE WALL CHART—Spiral bound listing up-to-date parts information for passenger cars and trucks, including listings for master and wheel cylinder repair kits, stop light switches and brake hoses. Eis Automotive Corp., P. O. Box 701, Middle-town, Conn.



NEW PRODUCTS AND CATALOGS

700—Battery Meter

To help car owners avoid the No. 1 cause of road breakdown—battery failure, a battery meter, introduced by Fox Products Co., Automotive Division, 4720 N. 18th St., Philadelphia 41, Pa., indicates at a glance just how battery is working and whether or not it needs replacing. It is also said to minimize service calls by service stations and garages.

Easily installed in a few minutes in any desired location, the meter



makes three tests: 1.—Charge in battery—before starting to show whether or not battery needs to be charged; 2.—Battery condition—while starting, and 3.—Electrical system condition—while running. This test indicates whether the amount of current flowing into the battery is low, safe or high.

Want more info? Use coupon on page 113 and you will get it!

701—Tire Spreader

Spreading tires from 4½" through 12" heavy duty with an air-powered tire spreader, introduced by Bishman Mfg. Co., Route 2, Osseo, Minn., is said to be easy and convenient.

A large air cylinder, controlled by foot pedals, spreads the tire for inspection or inverts it for easier repairing. The unit is mounted on a sturdy base which places the tire at a convenient working position, the manufacturer said. Foot controls leave both hands free to handle the tire and built-in rollers allow tire to be rotated easily. Occupying a minimum floor space, unit operates on a regular air supply. It may be bolted down if desired.

Want more info? Use coupon on page 113 and you will get it!

702—Touch-Up Kits

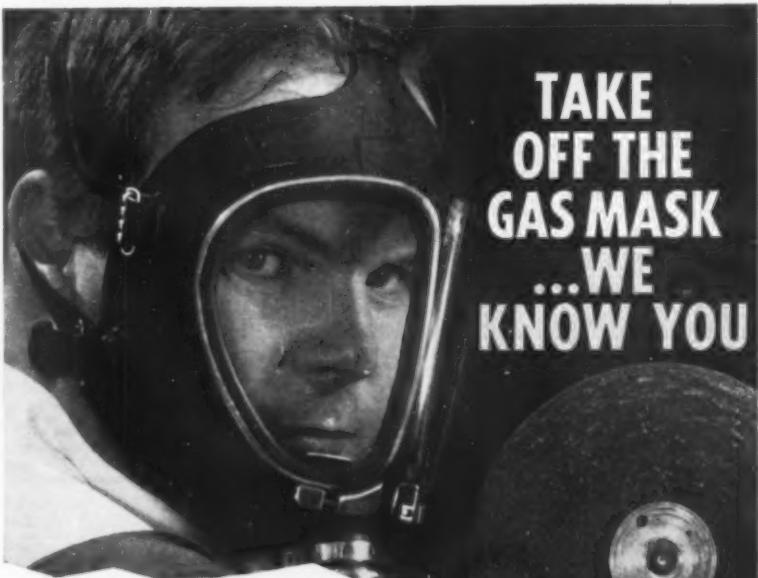
Restyled touch-up paint applicators and merchandising stands for 1960

Valiant, Plymouth, Dodge, De Soto, Chrysler and Imperial cars, announced by MoPar Division, Chrysler Motors Corp., P. O. Box 1718, Detroit 31, Mich., are said to contain nearly three times more paint than previously offered.

An improved spiral agitator facilitates mixing and assures a more accurate color match, it was claimed. The long bristle brush reportedly will not dry out when cover is closed. Cap contains a built-in supply of rubbing compound to remove fine scratches from the car finish and to polish touched-up areas. Each display stand consists of 18 applicators.

Want more info? Use coupon on page 113 and you will get it!

SUDDENLY... DUST IS NO LONGER A PROBLEM!



TAKE
OFF THE
GAS MASK
...WE
KNOW YOU

We know the trouble you've had with plastic fillers. The hazardous dust, the itching effects, the skin burns, the injurious fumes. That's why we worked nearly two years to develop our new

BLACK SOLDER with non-toxic CREAM HARDENER

It's the answer to your problems — and the most significant advance in autobody repair methods yet!

Black Solder is more than just an improved body filler . . . Its formula is based on an entirely new RESIN SYSTEM that results in the closest thing to actual lead solder shriveling of the filler. In addition, adding "lead" on Black Solder repairs does not float in the air, nor drops to the floor like lead. It is this unique property of Black Solder that has at last taken the hazard out of the plastic system of autobody repair work.

The result of this new concept is a body filler with unequalled flexibility and adhesion — a body filler that will not shrink, crack, or corrode — that actually "gives" with the metal when subjected to impact.

But most important of all — Black Solder has a new, non-toxic CREAM HARDENER that eliminates odor and skin irritation from the repair picture. And in addition — RAPID CURE — NO PINHOLES — NO "DUST STORMS".

Not a dream — not years away — but available right now — today — from Marson, pioneers in resin chemistry.



Marson
CORPORATION

REVERE 51, MASS.

703—Open-End Wrench

An open-end wrench with ratchet action and more gripping power, introduced by Royal Tools, York St., Hanover, Pa., grips nut at 3 points and applies pressure to flat surfaces, not corners.

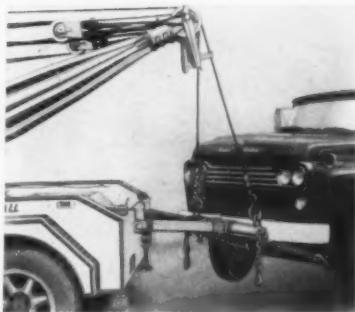
Ratchet action is provided by a spring-loaded pawl inserted into one side of the open end, which, because of its shape and the way it is spring-loaded in its slot, reportedly permits the wrench to ratchet smoothly and easily without removing wrench from nut. The tool steel pawl, hardened to 48-51 Rockwell C, is said to withstand many times the compressive force that can be exerted by

direct leverage. Wrench is especially effective on damaged or out-of-tolerance nuts or bolt heads, according to the manufacturers. It is available in 5 sizes: 7/16", 1/2", 9/16", 5/8" and 3/4", packaged in a compartmented plastic roll-up kit.

Want more info? Use coupon on page 113 and you will get it!

704—Truck Towing Hitch

For handling large, heavy trucks, buses and trailers, a heavy-duty towing hitch, announced by Ernest Holmes Co., 2505 East 43rd St., Chattanooga 7, Tenn., when used with a wrecker capable of rendering such service reportedly provides a fast,



safe means of handling even the largest and heaviest trucks.

The "TH 290 Truckmaster" hitch, with a V-type spacer bar, is said to simplify positioning of the wrecker to the disabled vehicle by heavy-duty telescopic spacer bars which automatically snap into locked position as disabled vehicle is raised by the tow truck. When in tow, spacer bars hold vehicle in fixed position, forcing it to track perfectly, thus eliminating danger of swaying or jamming into wrecker body, it was claimed. Hitch is designed for use with the company's "650" and "850" models, but may be adapted to any wrecker of equal power and capacity, according to the manufacturer.

Want more info? Use coupon on page 113 and you will get it!

705—Engine Coolant

"Kool-It," a gasoline engine coolant, introduced by Supersite Corp., Derby, Conn., is said to pick up heat from the engine and dissipate it through the radiator faster than water alone.

Product is a pure, stable chemical that will not separate or break down, the manufacturer said. It reportedly will mix with all types of anti-freeze, lubricate water pump, prevent rust and corrosion in water and will not harm skin, rubber or rubber composition.

Want more info? Use coupon on page 113 and you will get it!

706—Car Panel Folder

A full-color file folder of appearance panels for car body shops, jobbers and manufacturers, published by the Slip-On Corp., 9515 Detroit Ave., Cleveland 2, O., is printed on heavy stock with an index tab and reportedly serves a two-fold purpose: (1) To give useful data on appearance panels and (2) to act as a file for any data that the repairman or jobber might collect on panels.

Want more info? Use coupon on page 113 and you will get it!

707—Brake Catalog

An 8-page condensed catalog for dealers and jobber salesmen, issued by Grey-Rock Division, Raybestos-Manhattan, Inc., Manheim, Pa., contains the company's brake lining and exchange brake shoe recommendations for all passenger cars and popular light trucks, including 1960 models.

Want more info? Use coupon on page 113 and you will get it!
(More New Products on page 122)



does it again!

New, Improved High-
Intensity 2-Way
WARNING LAMP

for all

EMERGENCY
VEHICLES

Here are the quick facts...

- Large 7" size—extra shallow depth.
- Advanced inside optical design of acrylic lens gives such intense brilliance and light distribution that no reflector is required.
- Smooth exterior cleans instantly and easily.
- Red, amber or blue lenses—steady light or flashing.
- 14-gauge wire conducts full power to bulb.
- Standard 50 c.p. bulb for long range visibility day or night.
- Roof mounted, rubber mounting pad.
- 6 or 12 volt circuit.
- Black baked enamel (B-200DF) or chrome body (B-200DFC).

ALL GRIFFIN PRODUCTS
COMPLY WITH NEW ICC
REGULATIONS

THE GRIFFIN LAMP COMPANY
SHELBY, MISSISSIPPI



Universal IN ACTION...



**\$102,200 TOTAL LOSS
PAID IN SIX DAYS**

Quality AT UNIVERSAL UNDERWRITERS CONTINUES IN CLAIMS SERVICE

Prompt, efficient claims service like this has always been Universal's goal . . . as thousands of satisfied subscribers will testify. Over thirty-eight years of experience in providing insurance and satisfying claims makes this possible. Our claims service staff members are *specialists* in handling losses for the franchised dealer.

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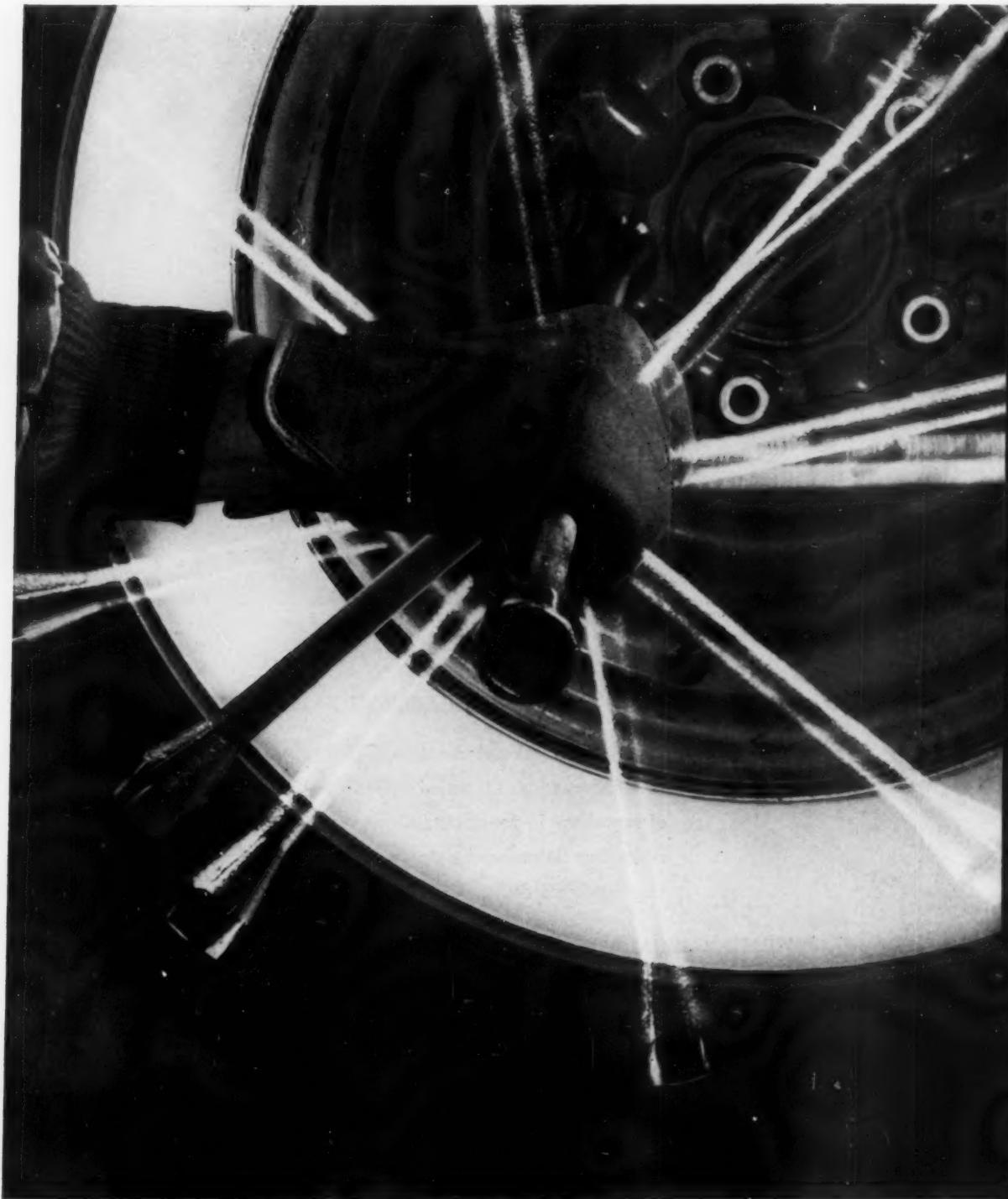
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TO HELP YOU GET MORE



WHEEL BUSINESS NOW...

HERE'S THE JOHNS-MANVILLE WHEEL OF SAFETY PROGRAM

Designed to Increase Your Sales . . . Brake Jobs, Tire Sales and Related Services

**USE THIS WINDOW
POSTER TO TIE-IN
WITH J-M'S WHEEL
OF SAFETY PROGRAM**



HERE'S WHAT IT IS: A nationwide program that sells *safe driving* . . . and sells *you* as your community's safety expert. Johns-Manville advertising in AMERICAN WEEKLY and other Sunday supplements urges thousands of car owners in your community to have a complete wheel check-up at stations displaying the "Wheel of Safety" sign. This advertising is designed to bring you more customers for J-M Asbestos Brake Lining . . . tires . . . and all your wheel services. Tie in . . . and make this a more profitable year!

HERE'S WHAT YOU GET: These free displays, sign and other promotion aids are available from your J-M Distributor:

- WINDOW POSTER
- LAPEL BUTTON
- STEERING WHEEL TAG
- CAR DOOR STICKER
- POSTCARD OR STUFFER
- AD REPRINTS

HERE'S ALL YOU DO: Check your J-M Distributor—if he doesn't call you first!—and join J-M's Wheel of Safety Program. Use the free pro-

motion aids he will supply . . . and cash in. Or write to Johns-Manville, Box 14, New York 16, N. Y. In Canada: Port Credit, Ont.

J-M ASBESTOS BRAKE LINING.

Many automobile manufacturers factory-equip their new cars with safe, dependable J-M Brake Lining. When you recommend it, you sell *quality* . . . smooth, sure stops . . . and top performance. A satisfied customer means repeat business for you. It will pay you to join the Johns-Manville Wheel of Safety Program!

JOHNS-MANVILLE
BRAKE LINING



New Products

(Continued from page 118)

708—Valve Holders

When working on overhead valve jobs, it is not necessary to remove complete cylinder head assembly from engine with use of "Nonslip" air plug valve holders, announced by Silver Seal Products Co., 1732 Howard St., Lincoln Park, Mich., which reportedly provide constant air pressure to hold valve in closed position.

Remove a spark plug and replace with air plug, attach hose and apply

pressure. Device enables mechanic to remove and install valve spring inserts without tearing down the engine. Plugs are sold in sets of 2 with 18mm and 14mm bases and standard spark plug threading. Hose connectors are interchangeable. Six connectors are available to fit over 12 known brands of quick connectors.

Want more info? Use coupon on page 113 and you will get it!

709—Fuel Line Kit

Faulty fuel line repair purportedly can be profitable by use of "No. RH-35" make-up kits, announced by Everhot Products Co., 2001 W. Carroll Ave., Chicago 12, Ill., each of which

contains 15' of 5/16" hose, 10' of 3/8" hose, an assortment of 8 insert fittings and 30 screw- and nut-type hose clamps for the 2 hose sizes.

The minimum-inventory kit is designed to enable any service station, garage, fleet or farm implement dealer to make up its own fuel line assemblies economically, the manufacturer said.

Want more info? Use coupon on page 113 and you will get it!

710—Brake Bleeder Adapter

A brake bleeder adapter to handle 1960 Ford products, including Continental, Lincoln, Mercury, Ford, Falcon and Comet, has been announced

CLEAN UP 2 WAYS WITH DUAL-ACTION LEE FILTERS



1 LEE FILTER DUAL-ACTION GIVES YOUR CUSTOMERS AN EXTRA SAFETY MARGIN
Lee Resinweld Oil Filters, with their unique Feridium® Anode, remove all sludge and acids, assuring greater engine performance, greater customer satisfaction. Lee Gas Filters remove both sludge and water. Lee flame-proof Air Filters prevent underhood fires caused by carburetor backfire. All combine to boost your sales.

2 LEE FILTER DUAL SALES-ACTION GIVES YOU AN EXTRA MARGIN OF PROFIT
First, Lee offers you extra profits on a unique line of filters for every make and model car. Then Lee doubles up by advertising nationally to 14,000,000 consumers in major markets—including yours! Call or write now for all the profit-making details.

LEE FILTER CORPORATION, EDISON, NEW JERSEY

LEE FILTER DIVISION, 267 NIAGARA ST., TORONTO, ONTARIO, CANADA



by Ammco Tools, Inc., 2100 Commonwealth Ave., North Chicago, Ill. "No. 4930" can be used with all Ammco "Model 4200" brake bleeders.

Want more info? Use coupon on page 113 and you will get it!

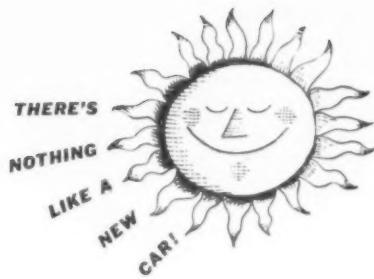
711—Shock Brackets

"No. 780 Shok-Mount" rear shock bracket replacements, announced by Champ-Items, Inc., 6191 Maple Ave., St. Louis 30, Mo., fit 1957-59 Ford cars and 1957-58 Mercury station wagons.



Made of heavy-duty castings, they are said to make a permanent repair without welding. No special tools are required to install, and perfect alignment is assured with no damage to shock absorbers and bushings, the manufacturer said.

Want more info? Use coupon on page 113 and you will get it!



There's
nothing
like a
new
car!



*there's nothing
like a new car!*



First step to an unforgettable vacation! That's how folks feel after reading these exciting General Motors ads that tell them: "There's Nothing Like A New Car!" These colorful advertisements stress the excitement of new car ownership—the fun it means for the whole family—and the truly rewarding investment it represents in satisfaction, comfort, and safety.

The amazing expansion in today's consumer income is the reason for this special GM advertising campaign in leading national publications. Con-



sumers have more disposable income than ever before, and more spare time in which to enjoy it. And economists predict that the next few years will find more and more families in higher income brackets—more of them moving to the suburbs—many more of them becoming multiple car families.

This prosperity will be reflected in even greater opportunities for everyone in the automotive business—and General Motors advertising helps GM dealers share this expanding market. It's great to be a GM dealer in the Sixties!

GENERAL MOTORS GO GM FOR '60

CHEVROLET • PONTIAC • OLDSMOBILE • BUICK • CADILLAC • ALL WITH BODY BY FISHER

712—Axle Oil Seal Kit

Consisting of a pre-lubricated seal plus necessary hardware, an easy-to-install oil sealing kit for trailer axles, announced by Chicago Rawhide Mfg. Co., is said to permit quick conversion to the use of SAE 30 oil as axle lubricant.

Sealing action is self-contained. Simple, sturdy design and construction reportedly assures foolproof installation and reliable operation. An impact-resistant hub cap of clear plastic permits constant observation of lubricant level, while the seal keeps out dirt.

Want more info? Use coupon on page 113 and you will get it!

713—Radiator Tester Adapter

To test cooling systems of van-type or cab-over-engine trucks, where radiators cannot be reached with conventional cooling system analyzers, "No. 9218" flexible test adapter, introduced by E. Edelmann & Co., 2332 Logan Blvd., Chicago 47, Ill., reportedly permits tests with standard equipment that could not ordinarily be used.

Device is a length of flexible metal-braided hose with pressure radiator cap-like connector fitting at each end. The unit enables a pressure-tight connection to be made between the hard-to-reach truck radiators and any standard analyzer.



Adapters are individually packaged in clearly identified cartons.

Want more info? Use coupon on page 113 and you will get it!

Dealers! NEW for 1960!

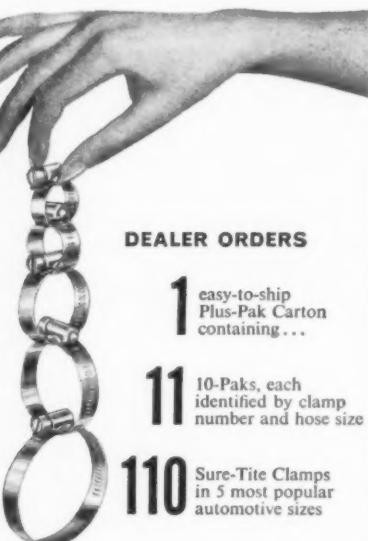
THE WITTEK *Sure-Tite* HOSE CLAMP **PLUS-PAK** DEAL

YOU BUY 100 YOU GET 110!

- Your choice of collared or deep-slotted screw
- Convenient carton with 11 colorful 10-Paks (10 FREE CLAMPS!)
- Prompt service that builds sales
- The sales pull of a long established, highly regarded name

*The accepted standard of the industry
for leakproof hose connections*

Sure-Tite PLUS-PAK



DEALER ORDERS

- 1 easy-to-ship Plus-Pak Carton containing ...
- 11 10-Paks, each identified by clamp number and hose size
- 110 Sure-Tite Clamps in 5 most popular automotive sizes



WITTEK MANUFACTURING CO., 4305 W. 24th Place, Chicago 23, Illinois

Southern Representatives

Battle and Davis Sales Co.

914 Texas Bank Building
Dallas, Texas
Telephone: Riverside 8-2965

Rudy Copeland

P. O. Box 2140
Ft. Worth, Texas
Telephone: EDison 5-1258

Hirsig-Brantley Co.

American National Bank Bldg.
Jacksonville 7, Florida
Telephone: FLanders 9-6657

BASA

714—Brake Fluid

Specifically formulated to withstand the high temperatures encountered in late-model passenger car, as well as truck and bus brake systems, a super-heavy-duty brake fluid, announced by the Raybestos Division of Raybestos-Manhattan, Inc., Bridgeport 2, Conn., is said to meet or exceed SAE heavy-duty specifications 70R3 and 70R1 and to conform to federal specification VV-H-910.

Product is recommended for older cars also, where owners want the extra safety of a brake fluid that will not boil out even under the most grueling conditions. It is available in 12-oz, quart and gallon cans, as well as 5-gallon, 30-gallon and 54-gallon drums.

Want more info? Use coupon on page 113 and you will get it!

715—Brake Bleeder

Operating on positive spring pressure rather than compressed air, "Speedbleeder" brake bleeder, introduced by Wesley Mfg. Co., 1305 Russell Ave. North, Minneapolis 11, Minn., permits one man to bleed a hydraulic brake system without help.

Device can be used anywhere, and, with 3 adapters, services all cars, including the 1960 Ford line. "Speedbleeder" is connected without wrenches. Operator fills master cylinder, connects the tool and bleeds each wheel. Over 20 lbs. of continuous spring pressure does the job in minutes, it was claimed. No brake fluid is wasted and moisture is eliminated, according to the company.

Want more info? Use coupon on page 113 and you will get it!

716—Tailpipe Racks

An answer to tailpipe and muffler storage problems reportedly may be had with one- and two-shelf tailpipe rack units, announced by Inca Metal Products Corp., P.O. Box 398, Carrollton, Texas, which measure 48" wide, 30" deep and 102" high.

Easily installed, racks are fully adjustable, require a minimum of floor space and can be used back to back, the manufacturer said. Bonded for maximum rust resistance, they are said to feature heavy-gauge posts, rugged shelf construction, rigid bracing throughout and baked-on green or gray enamel finish.

Want more info? Use coupon on page 113 and you will get it!

ANNOUNCING

a revolutionary new
hydro-pneumatic suspension assist—
THE
GOLDEN GLIDE
Load-Absorber

PAT. APPL'D. FOR

Improves load-carrying capacity without impairing riding comfort—even under normal load conditions

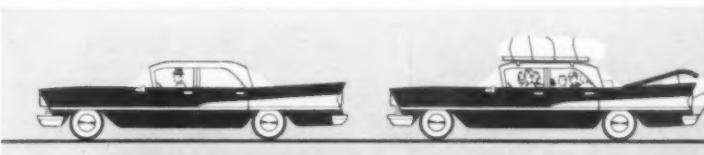
Golden Glide announces a great new advance in the field of ride control—the self-compensating, adjustable, hydro-pneumatic load absorber.

Installed in place of shock absorbers in the rear of the car, Load-Absorbers do everything any combination of steel helper springs and shocks can do—and much more.

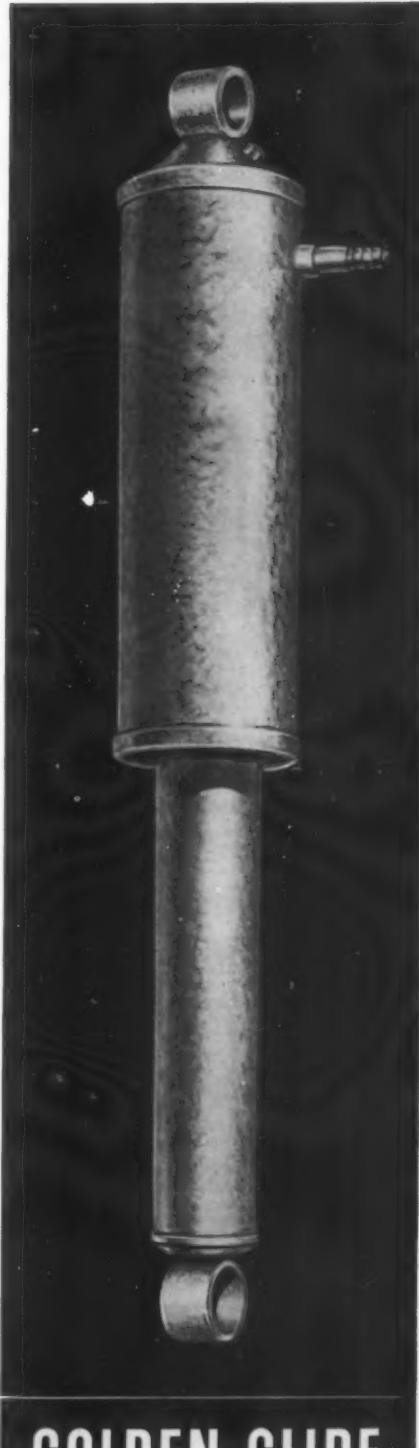
Golden Glide Load-Absorbers carry the load on a cushion of air at any riding height the car owner desires. They automatically sense a change in the car load, automatically compensate by hydro-pneumatic pressures to maintain level and stable riding qualities. Each Load-Absorber is a completely sealed unit containing a flexible-wall air cushion and an oversize new design hydraulic shock absorber.

Golden Glide Load-Absorbers are pre-set at the factory for light, normal, or heavy loads and driving conditions. To adjust for *extremely* heavy loads or trailers of any kind, an external valve on the Load-Absorber is provided for increasing air pressure, thereby raising the rear of the car to the desired riding height.

Under all road and load conditions Golden Glide Load-Absorbers will improve load carrying capacity, stability and riding qualities. Call, wire or write for further details.



Gives a comfortable, stable ride under light and heavy load conditions



GOLDEN GLIDE

Load-Absorber

PAT. APPL'D. FOR

THE GOLDEN GLIDE SHOCK ABSORBER COMPANY, Cleveland 15, Ohio

717—Door Upholstery

"Beauti-Door," said to be the only automobile interior trim product especially designed to replace worn and damaged door upholstery, introduced by The Jason Corp., 1040 Grand St., Hoboken, N. J., is electronically quilted and padded to simulate the "new-car effect."

Material is a washable, stain- and scuff-resistant vinyl, it was claimed. Two panels, large enough to fit any car door, are pre-packed in polyethylene. Installation reportedly requires no special tools, no sewing and no gluing.

Want more info? Use coupon on page 113 and you will get it!

718—Gasket Catalog

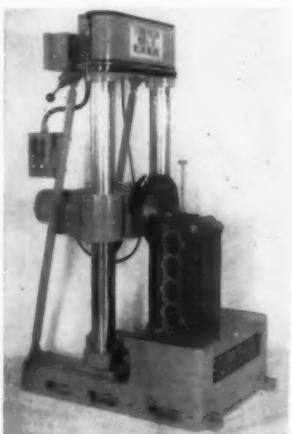
A 40-page, complete-line gasket catalog, published by Sterling Auto-motive Mfg. Co., Centex Industrial Park, Elk Grove, Ill., lists 1,200 gaskets for original equipment and standard replacement, including engine, transmission, differential and rear-axle gaskets for cars, tractors, buses and trucks. All gaskets are indexed by original equipment manufacturer in clean-counter reference style, while easy-to-read tables permit rapid selection of the correct replacement gasket for any application desired.

Want more info? Use coupon on page 113 and you will get it!

719—Milling Machine

A combination head and block milling machine designed to conserve floor space (requires 34" x 47") while permitting fast setup of heads and blocks, announced by Storm-Vulcan, Inc., 2225 Burbank St., Dallas 35, Texas, weighs 3,200 lbs. and is said to afford positive stock removal control.

It has a work capacity of 15" x 39", cutter feed 5½" per minute and



If you haven't taken advantage of Dill's 4 Big Money Saving Offers, DO IT NOW!

DEALERS EVERYWHERE are taking full advantage of our special Dillectric Clamp offer. If you missed it, study the offers below. Take advantage of the one that fits you. Remember, the spring and summer driving season is under way. Get set now for the extra profits you can make repairing tires and tubes right...The Dillectric way! DO IT NOW!

One (or two) of these offers is Best for You

1.

If you have a Dillectric Pressure Clamp (Model 6685) that is not operating properly,



DILL WILL PUT IT IN PERFECT WORKING ORDER—AT NO CHARGE WHATSOEVER! AS A SPECIAL INDUCEMENT, A BONUS CAN OF 40 DILLECTRIC PATCHES (WORTH UP TO \$60 IN REPAIRS) WILL BE SENT TO YOU WITH YOUR CLAMP!

3.

If you do not have a Dillectric Unit now, you can get the new No. 6685 Pressure Clamp above for just



\$9.50 (\$15 value)! Order from your supplier. For tubeless tire repairing also specify "U" Clamp Kit No. 6690K. Kit (pictured right) includes "U" Clamp, secondary and ground wires, buffer kit, threading tool and a can of tubeless speed patches. Cost of kit just \$14.80.

Clip the address below and paste on your wrapped clamp. Your bonus patches will be sent to you with your reconditioned clamp. Important—Fill in all information completely.

From:

Name _____
Address _____
City _____ Zone _____ State _____
Oil Supplier _____
Address _____

TO:

DILL
Manufacturing Co.

Dept. SA-5, 700 E. 82nd Street • Cleveland 3, Ohio

a rapid traverse of 86" per minute. Features are ease of operation, accuracy of production, minimum floor space requirements, plus flexible application to all heads and blocks, it was claimed.

Want more info? Use coupon on page 113 and you will get it!

720—Car Washing Detergent

Washing time is said to be saved with a powdered detergent developed especially for professional car washers by E. I. du Pont de Nemours & Co., Wilmington, Del., because it can be sponged on, then rinsed off, with no wiping required.

One tablespoonful makes two gallons of washing solution, reportedly costing only one to two cents for each car washed. Product removes dirt, traffic film, oil and grease quickly and easily, but has little effect on existing wax, it was claimed. It is safe for all car finishes, including acrylics and "super" enamels, the manufacturer said.

Want more info? Use coupon on page 113 and you will get it!

721—Fittings Catalog

A 56-page catalog—the largest in its history—covering every type of brass fitting it manufactures, as well as service tools and replacement items, published by E. Edelmann & Co., 2332 Logan Blvd., Chicago 47, Ill., includes battery testers, battery fillers and service kits, cooling system analyzers, life-lines, power steering lines and effective merchandisers for jobber and dealer use, listed alphabetically and numerically with interchangeability covering all its gasoline and fuel lines, brass fittings and power steering hose assemblies.

Want more info? Use coupon on page 113 and you will get it!



YOU CAN LOOK . . .

***But it's the vital differences you can't see
that make such a big difference in an engine!***

● Your naked eye can't see the remarkably even grain structure in Allied cylinder sleeves. But it's there. The right hardness. The tiny flakes of graphite perfectly distributed. The result: fast, scuff-free break in . . . followed by exceptional wear resistance.

In short, you can't see the difference centrifugal castings make . . . except in the record of long, trouble-free performance.

Allied pistons have equally important differences. The tolerances that are the closest in the industry. The extra features like tin finish on all aluminum pistons. The perfect match in both design and materials for the original equipment you're replacing.

This same quality extends to the chrome ring sets in every Allied sleeve assembly . . .

rings of the latest design that have proven their superiority more times than any other make of ring . . . in both original equipment and replacement applications.

Better see your N·A·P·A Jobber now . . . about the differences you can't see . . . but your customers can . . . in performance.

**ALLIED AUTOMOTIVE PARTS COMPANY
INDIANAPOLIS 7, INDIANA**



722—Timing Light

"HT-800" timing light, announced by Herbrand Equipment, Herbrand Division of The Bingham-Herbrand Corp., Fremont, O., is said to be the first such light to incorporate "controlled output," made possible because of voltage matching switch which completely locks out the incorrect voltage.

Light is equally as brilliant on 6- or 12-volt system, it was claimed, and it has an optically-ground lens. It is said to be impossible to burn the light out and it flashes only when the battery voltage and switch position match. Underload circuit more than doubles light's service life, the



manufacturer said. A tough plastic case is electrically non-conductive and easily cleaned.

Want more info? Use coupon on page 113 and you will get it!

723—Thinner

For both conventional lacquers and acrylics, an all-purpose thinner, announced by Ditzler Color Division of Pittsburgh Plate Glass Co., 8000 W. Chicago Ave., Detroit 4, Mich., reportedly not only produces an excellent gloss when used in colors but also flows undercoats so they fill well and sand easily. "DTL-876" will be available in 5-gallon cans and in drums.

Want more info? Use coupon on page 113 and you will get it!

724—Cam Bearing Tool

A cam bearing tool with neoprene-covered expanding mandrels, introduced by Dura-Bond Engine Parts Co., Station A, P. O. Box 85, 3201 Ash St., Palo Alto, Calif., is said to do the work of 125 separate driving plugs.



Tool also makes possible the installation of undersize bearings in all engines for tighter oil seal and quiet hydraulic lifters, the manufacturer said.

Want more info? Use coupon on page 113 and you will get it!

725—Filter Cartridges

An assortment of six lube oil filter cartridges, announced by Wix Corp., Gastonia, N. C., is said to be all that is required to service 85% of the foreign cars in the United States.

Want more info? Use coupon on page 113 and you will get it!

726—Battery Testing Line

A line of test equipment and battery chargers, introduced by Allen Electric and Equipment Co., 2101 N. Pitcher St., Kalamazoo, Mich., includes a complete engine analyzer consisting of a cam angle meter, tachometer, volt-amp tester and an ignition output tester.

Complete operating instructions and hook-up diagrams are printed on the face of the test instruments. Accessories are offered in a complete assortment from timing light through compression tester, ammeters and exhaust analyzers, according to the manufacturer.

Want more info? Use coupon on page 113 and you will get it!

CORVAIR-VALIANT
differential
filler plug tool

2 tools in 1 THAT REPLACES

1. socket
2. ratchet
3. allen wrench
4. extension

NO. 199
\$275
MECHANIC'S NET

Herbrand Tools

HERBRAND DIVISION

THE BINGHAM-HERBRAND CORPORATION • FREMONT, OHIO

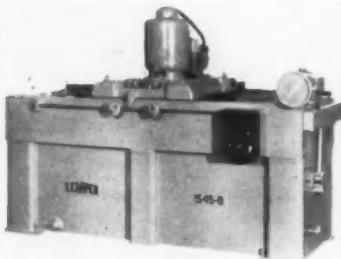
Be prepared to save time and simplify the job when you check Corvair or Valiant differentials. Use this special new Herbrand wrench, which actually replaces four tools! And simply by flipping the drive end from hex to socket, you convert from Valiant to Corvair applications. It is perfectly balanced, has a deep, full-knurl grip and will add more profit to the job every time it's used. Ask your jobber.



727—Block, Head Grinder

Set-up is said to be fast with "Model 545-B Pushbutton" wet cylinder block and head grinder, introduced by Lempco Products, Inc., 2953 E. 55th St., Cleveland 27, O., which precision-grinds heads, blocks (L and V) and manifolds for all 1960 cars and trucks.

Stock is removed equally and evenly, it was claimed. Grinder can be set to remove a minimum of stock



when required. Work surface is "face-up," at operator's waist level and completely visible. Work reportedly is "leveled" easily and precisely, dial-indicated for extreme accuracy. Exclusive "Roll-Over" fixture on the 545-B assures same-plane grinding and perpendicularity of cylinder bores to block surface.

Want more info? Use coupon on page 113 and you will get it!

728—Cleaning Gun

Wherever fast, thorough cleaning and degreasing are necessary, a high-velocity spray gun announced by The DeVilbiss Co., 300 Phillips Ave., Toledo 1, O., is said to deliver a driving spray to knock off dirt and provide coarse, hard-hitting drops to penetrate built-up films.

Gun is adjustable for a full range down to a gentle mist, it was claimed. Extension nozzle permits spraying into cavities and other hard-to-reach areas and an adjustment on the gun permits a quick change of the amount of material being sprayed. Tool can be used with all common cleaning and degreasing materials. Nozzle and extension tube are of brass.

Want more info? Use coupon on page 113 and you will get it!

729—Spark Plug

Especially designed for the Chevrolet Corvair, a spark plug announced by Champion Spark Plug Co., 900 Upton Ave., Toledo 7, O., has an auxiliary gap that reportedly minimizes fouling tendencies because of carbon deposits.

A projected core nose design is said to further improve operation, permitting combustion gases to burn away deposits at low speeds and keeping plugs cooler when operating at high speeds. Other features include a plated, rust-resistant finish and an attached gasket for easier installation and removal. Plug also has extra-heavy "powerfire" electrodes of chrome-nickel alloy to increase life and performance.

Want more info? Use coupon on page 113 and you will get it!

730—Hand Cleaner

Containing no harmful abrasives or ammonia, "Wilclean" hand cleaners, announced by Wilco, Inc., 4425 Bandini Blvd., Los Angeles 23, Calif., is said to keep skin from cracking, chapping and drying out.

Product contains lanolin and hexachlorophene and reportedly will not break down in the package in summer or winter temperatures, nor will it liquefy when exposed to air. However, it liquefies smoothly on the hands, it was claimed, cleaning dirt and grease away rapidly with or without water.

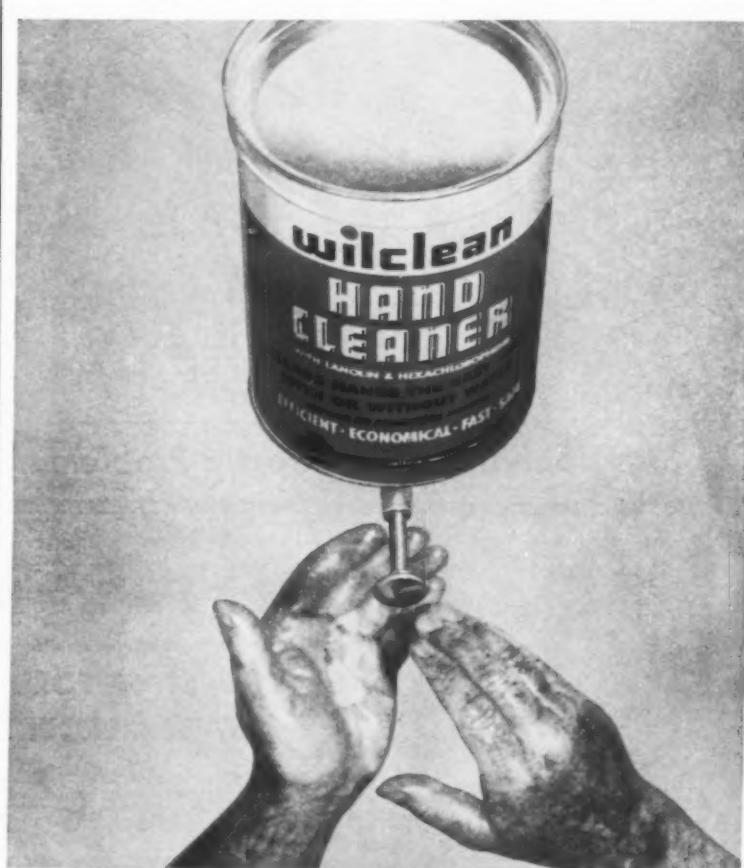
Want more info? Use coupon on page 113 and you will get it!

731—Chrome Pickup Stacks

To meet the demand of pickup truck customizers and racing enthusiasts, Grand Automotive Products of Melrose Park, Ill., has announced a line of chrome stacks for pickups from 1947 up to the latest models.

Installed functionally, stacks are shown in horizontal and vertical, with either smooth chrome or ripple chrome body-pipes. Adjustable 3-way tips deflect exhaust fumes to the side, back or downward. Installation is said to be simple with minimum of time.

Want more info? Use coupon on page 113 and you will get it!



notice the can? It's just the finest waterless hand cleaner made on this good, green planet. **Won't liquefy** in any weather, **won't break down** under any conditions. And **gentle!** No ammonia. No abrasives. Just **soothing lanolin**, costly hexachlorophene. **Cost?** Less than you're paying now... or have ever paid before. Demand Wilclean in this handy economical dispenser-pak. →



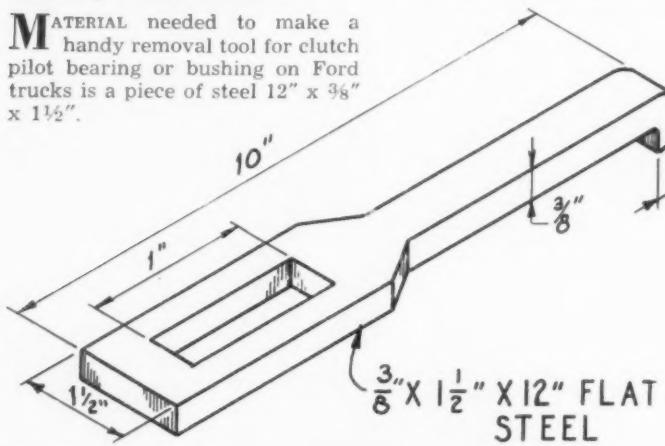
Ask your jobber or write Wilco, Inc., 4425 Bandini Blvd., L.A., Calif.



TIME SAVERS

Making a Ford Clutch Bearing Removal Tool

MATERIAL needed to make a handy removal tool for clutch pilot bearing or bushing on Ford trucks is a piece of steel 12" x $\frac{3}{8}$ " x $1\frac{1}{2}$ ".



Cut to shape as shown. Heat and bend to form rocker end. Cut

square hole for lever bar.—C. J. Counell, Wilkerson Garage, Greenwood, Louisiana.

Enlarging Car Body Hole Without Marring Paint

MANY times when using a rat-tail file to enlarge a hole on the painted surface of the car, a person in a hurry will allow his file to slip out of the hole, causing a scratch on the paint.

To prevent this, cut a short length of wiper hose and push it up on the end of the file, letting it extend just beyond the end. This will prevent a scratch if file slips out of hole.—Fred H. Findley, Service Manager, Reform Motor Company (Ford), Reform, Alabama.

The Right Solution To A Costly Problem...

NO. 780 SHOK-MOUNT

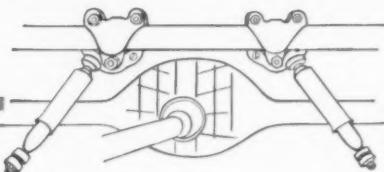
(Replacement for Rear Shock Brackets)

for 1957-'58-'59 FORD CARS and
1957-'58 MERCURY STATION WAGONS



HEAVY DUTY CASTINGS

\$12.95
List
Pair



EASY TO
INSTALL

PERMANENT REPAIR

Eliminates the welding problem, no grief from comebacks — no special tools required. Perfect alignment, no more shock absorber and bushing damage. Proven in fleet and passenger use.

Write for 1960 catalog

ORDER FROM YOUR JOBBER



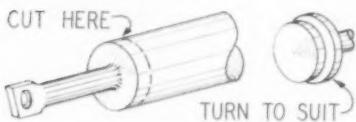
CHAMP-ITEMS, INC. 6191 Maple Ave., St. Louis 30, Mo.

GOT A GOOD IDEA?

\$7 will be paid for every time - saver or shop short - cut accepted for publication in this section. A photo or rough sketch will make your idea more valuable. Only original items, not previously published, offered for our exclusive use, can be considered. Send them to: Southern Automotive Journal, 806 Peachtree St., N. E., Atlanta 8, Ga. Rejections cannot be returned.

Making Suitable Drivers To Install Grease Seals

GREASE seals of different sizes can be driven in place with drivers made from the ends of old driveshafts. The ends when cut off at



the right place can be turned to the desired size on the shop lathe.—S. A. Smith, Mullis Motor Company (Chrysler-Plymouth), 117 Avery Avenue, Morganton, North Carolina.

Correcting Inaccuracies In Gasoline Gauges

AFTER some steady complaints of inaccurate gasoline gauges in late-model cars, I looked into the matter carefully and discovered the gauges did not have a good ground.

To correct this, I removed one of the screws that holds the tank unit in place and installed a lead wire under it. The other end of the wire I ground with the car's electrical system. This procedure is a certain cure.—Carl B. Odam, 3809 Flint Avenue, Lubbock, Texas.

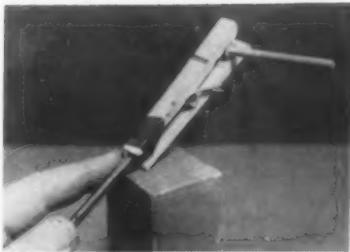
Protecting the Brushes On Ford Generators

FORD cars and trucks for 1957-60 do not come equipped with splash aprons and the generator catches all the mud, water and dust, causing generator brushes to fail prematurely.

To remedy this, we install a Falcon generator cover #B9MM-10170A and have a happy customer—Noble T. Soper, 408 West Anthony, Medicine Lodge, Kansas.

Using Clothespin Tool For Close Quarters

MUCH time can be lost when inserting a screw, bolt or pin in an almost inaccessible part of the car. The task, however, can be simplified by fastening a spring-type clothespin on the blade of a



long, thin screwdriver.

The bolt or pin to be inserted can then be clamped in this simple device in the proper position and in-

"You can cut set-up time in half with a Van Norman 438 Crankshaft Regrinder!"



The greatest operation speed ever built into a crankshaft grinder is now yours with the new Van Norman 438. It features pendulum-lever crankshaft alignment . . . 360° Rotary Heads . . . electro-matic table traverse . . . fast automatic wheel retraction . . . variable drive work head . . . quick-set outboard counterweights . . . dial-o-matic steady rest for fast location of crankshaft throws . . . built-in Bijur one shot oiling system . . . 18 x 46 capacity with 24" grinding wheel.

The 438 is sturdy, massively designed, and built to maintain its alignment and accuracy for many years. Moderately priced for even the smallest shop.

Designed by Van Norman . . . builder of precision machine tools since 1888 . . . all known speed methods of grinding crankshafts have been built into this entirely new and modern crankshaft grinder.

2371

Remember,
it pays to Van Normanize.



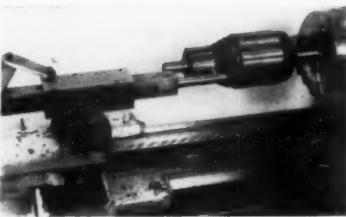
VAN NORMAN

Springfield 7, Massachusetts
A DIVISION OF VAN NORMAN INDUSTRIES, INC.

stalled. For use in extremely close quarters, the clothespin clamp can be reduced by cutting or grinding. It is a simple matter to free the screw or pin from the clamp by a twist of the wrist.—Glen F. Stillwell, 340 Ninth Street, Manhattan Beach, California.

Using Lathe Keyseater For Mica Undercutting

A LATHE keyseating attachment, commonly used on small engine lathes for cutting keyways,



is an ideal tool for undercutting mica on commutators after they have been re-turned.

The armature may be chucked

at one end, as shown, and hand rotated to each undercutting position. A sharp-pointed lathe tool bit is used in the hand lever actuated slide of the keyseater.—H. J. Gerber, Assistant Professor, Oklahoma State University, Room 107, Industrial Building, Stillwater, Oklahoma.

To Facilitate Removal Of Pontiac Oil Pans

I HAVE found an easier way to remove oil pans from 1959-60 Pontiac cars than the one recommended in Pontiac shop manuals:

Remove front engine support bolts (one on each side of engine), jack up motor from 2 to 3" in front and drain oil. Remove pan bolts and front main bearing cap. The latter procedure permits the pan to come down. To reinstall pan, place it in position and hold the front down. Install front cap with $\frac{3}{4}$ box wrench.—Grover D. Rogers, Route 4, Box 92, Fitzgerald, Georgia.

Upping Heater Output In Corvair Cars

ON THE Corvair, some of the heaters do not deliver enough heat for a very cold day. This is because the hole in the brass tee where fuel line runs to burner is too small to deliver sufficient gasoline.

Remedy: drill larger hole in tee.—Jim Sirmans, c/o Harrison Chevrolet Co., Marianna, Florida.

Filling Master Cylinder On Power Brakes

FOR easier and quicker checking and filling of the master cylinder on Chrysler cars equipped with Kelsey-Hayes or bellows-type assist, first remove the pin from brake pedal to master cylinder operating rod situated under the dash.

Next, start the engine and depress brake pedal all the way to floor and hold it with a brake jack or other suitable means. This will collapse the power unit so that master cylinder may be reached easily for checking.—Wayne Woolman, 433 S. Thompson Street, Vinita, Oklahoma.

Cutting Out Designs In Sheet Metal

WHEN we have a design, letter or piece of sheet metal to cut out and match up on a body re-

HALF OF YOUR CUSTOMERS ARE GOING TO BUY A NEW BATTERY THIS YEAR!

WILL THEY BUY IT FROM YOU?

The Fox 200 Battery Tester and the Fox 372-H Powercharger put any service station in the battery selling business at minimum cost.

The 200 Tester gives fast, accurate tests to show whether battery should be charged or replaced. Trouble caused by generator or regulator is also easily spotted.

The 372-H Powercharger puts a full charge into new, dry batteries after activation and a full charge into every battery that needs recharging.

Test and charge completely. These two practices stop "come-backs".

For full particulars on building battery sales and service, write Fox Products Company, 4706 N. 18th St., Philadelphia 41, Pa.



FOX

METHODS AND EQUIPMENT

FOR SELLING AND SERVICING BATTERIES



HOLMES Provides for FASTER, SAFER, Handling of DISABLED TRUCKS!

New TRUCKMASTER TOWING-HITCH Simplifies HEAVY-DUTY Work ▶

The New HOLMES Towing Hitch was designed for Extra Heavy Duty work and, when installed on a suitable Wrecker provides a very FAST, SAFE means of handling—even the largest and heaviest trucks.

The TRUCKMASTER greatly simplifies the hooking-up and towing of Big, Bulky Trucks, Busses, and Trailers that are now extremely difficult to handle. With the new HOLMES Towing Hitch, the initial positioning of the wrecker to a disabled vehicle is *not critical*, and the hook-up can be made with considerable speed. This is made possible by Heavy Duty, Telescopic Spacer Bars which automatically snap into locked position as the truck is raised, thereby assuring extra security and mobility of action for Towing.



Assures Maximum Security and Maneuver-a-ility for TOWING

When in-tow, the disabled vehicle is forced to track perfectly *without swaying or jamming* into the tow truck. Towing from an apex behind the wrecker provides a sharp turning radius which permits the disabled vehicle to be backed into close places with the same ease as a trailer. The TRUCKMASTER is furnished with V-type Spacer Bars, Mounting Brackets, and a set of 8 ft. chains with hooks. Send today for full details.

HOLMES 650 WRECKER

A Power-operated, Heavy Duty Wrecker with a rated 20 Ton Capacity. Built with two speeds of operation: SLOW for Heavy Trucks and Busses—FAST for light cars and Trucks. Handles Wide Variety of Work and is capable of Earning Big Profits. For installation on trucks of 3 to 5 ton capacity. Send for Full Details.



Chattanooga 7.

Tennessee

pair, our common practice is to outline the shape on a piece of tracing paper and cement the tracing to the sheet metal for a guide while cutting. However, in handling the metal, the pencil lines on the tracing are often smudged beyond usefulness.

To avoid this, we cement the design to the metal with the pencil lines down. The lines are then visible through the paper but they cannot be smudged.—Stan Clark, Stanley Clark Service, Box 2162, East Bradenton, Florida.

Curing Erratic Actions In Some Gas Gauges

ON COMPLAINTS of erratic gas gauges, the problem is not always gauge trouble. We find that on some late-model Fords the gas tank vent is restricted, causing—in many cases—the automatic cut-off on the gas pump filler nozzle to cut off before the tank is full.

To discover if this is the trouble, we clear out the restricted vent tube and fill tank. Gauge will read exactly full, as it should, if prob-

lem was in the vent tube. This knowledge has saved us a lot of time and money.—James D. Martin, Service Manager, Jack Hughes Motors (Ford), 100 E. San Antonio, San Marcos, Texas.

Checking for Oil Leaks In Torque Converter

HERE is a quick and easy way to check torque converters for oil leaks:

First, choose a rubber radiator plug (usually found in radiator repair shops) to fit the opening in the torque converter. Next, install a tubeless tire valve assembly in the radiator plug, then install the radiator plug in the converter. Apply approximately 15 pounds of air pressure in the converter and lower it in a tube of water. If there are leaks, air bubbles will show.—Gayle Oglesby, 220 Hopkinsville Street, Greenville, Kentucky.

Stopping Shift Rattles On Fords and Others

HERE is a good way to stop many shift lever rattles, shift tube rattles and shift lever vibration on Ford cars and others where the shift tube is run outside steering column:

Lubricate a piece of heater hose approximately 1½" to 2" in length with Lubriplate or other good lubricant, press together and force between the shift tube and the steering column below the dash so that it will not be visible. This will prevent rattles and squeaks in this area.—Fred H. Findley, Service Manager, Reform Motor Company (Ford), Reform, Alabama.

Jacksonville Selects Davidson

Don Davidson of Lynch-Davidson Motors (Ford) is the new president of the Jacksonville (Fla.) Automobile Dealers Association. Other officers are Woodrow W. Edmondson of North Florida Motor Co. (Lincoln-Mercury), vice president, and Gordon Thompson, Jr., of Gordon Thompson Chevrolet Co., treasurer.

Cocoa-Merritt Island Elects

The Cocoa-Merritt Island (Fla.) Automobile Dealers Association has elected Robert Ennis of Merritt Island Garage (Oldsmobile) president. J. A. Hooper of Hooper Motors, Inc. (Chrysler-Plymouth) is secretary-treasurer.

NEW LIFTOP BOX

MORE CONVENIENCE . . .
GREATER PROTECTION . . .

Another CAMEL "first" . . . the newest and finest package for repair patches — the LIFTOP BOX!

Easier to open, easier to close — CAMEL Vulcanizing Patches are surer to be kept cleanest and driest.

THE
PERFECT PATCH
NOW
PERFECTLY KEPT
IN THIS
PERFECT BOX!



CAMEL® . . . THE ONLY PERFECT COMBINATION
FOR TUBELESS TIRE & TUBE "LIFE-OF-THE-TIRE" REPAIRS !



IMPROVED SUPREME
ELECTRIC BUFFER



THE BEST
TIRE GUN

MOST SERVICEABLE
TUBELESS TIRE CLAMP



WORLD'S LEADING
VULCANIZING PATCH



H. B. EGAN MANUFACTURING COMPANY
MUSKOGEE, OKLAHOMA

TORONTO, CANADA

IGOA: Now in Long Pants

FROM a fledgling association in April of 1955, represented by a roomful—a small room—of garagemen from a total of nine states, IGOA has grown to encompass a present membership of over 6,000 independent garagemen in 38 states.

Today we are functioning, in a true sense, as a national garage-men's association.

Rather than say IGOA "grew," perhaps it would be more fitting to say IGOA was built. Growing implies a naturalness of things, while building connotes the hard work and thought that went into it. Many have contributed to the building of IGOA.

This original small group of garagemen who fathered IGOA saw not only the necessity of

By RALPH H. JAMES
Executive Director, a Co-Founder
Independent Garage Owners of
America
Tulsa, Okla.

pendant from one another, how could we make a dent on their im-

placable sense of self-sufficiency and skepticism toward the rest of the automotive industry?

I assure you it wasn't easy. They say the thing a bald-headed man needs most is a thick skin. While I am not bald-headed—as yet, I have often felt the need of a thick skin in this line of endeavor.

Crusader James

Few leaders in the industry have ever known the depths of discouragement in pursuing a worthy cause as has the author. Almost single-handedly, aside from a handful of still-loyal supporters, ex-garageman James has bulldozed an increasing number of garagemen into lifting their sights. Outlined here is the growth of IGOA since birth and particularly the last six months. Without these fruits of success, James undoubtedly would yearn to operate a garage again.

organizing to save their industry, but also envisioned the opportunities available to them by working out the problems of their industry on a collective basis.

By using the strong and flexible tool afforded by an association—an association developed on a local level, a state level and a national level—much could be accomplished toward elevating the entire automotive repair industry and to strengthen the independent chain of distribution.

Collectively, the garagemen are a tough lot to organize. Faced with the challenge of uniting variously scattered local groups, separately representing a small, tight unit of independence, which considered itself not only isolated from the rest of the automotive trade, but inde-

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a new standard of quality...

...mats made with **POLENE***

outdates all mats without this miracle material

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*Don't wait
'til it's too
late! Check
mounts with
every motor
or with each
transmission
repair job.*



Next time you order protector mats,
insist on this new miracle material
...the new standard of quality. It has
a soft luster-sheen finish that adds
sparkle to any car interior...new
or old. A complete family of
mats in five colors
for front and rear floors.

*Trade Mark

360

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A DIVISION OF ANGUS INDUSTRIES, INC.

There were the countless times I would be called upon to drive a considerable distance to hold a garagemen's meeting, only to arrive and confront my audience of one or two. There is another meeting I recall with mixed feelings. This particular meeting was held at a garage, and to put it bluntly, was quite a "flop." I returned home late that night, one discouraged, defeated missionary. But that wasn't all—a few days later, a statement came in the mail, "Charges for rental on

chairs." We had no treasury, and I had holes where pockets were supposed to be.

That was how I developed my thick skin. In any event, three years later this same group of garagemen formed an IGO unit and affiliated with IGOA. So I have learned the lesson well, that strength is the result of perseverance. It is the constant dripping that melts away the rock, or to put it another way: it is the repeated hammering of the nail that finally drives it into the wall.

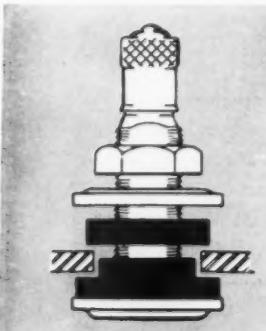
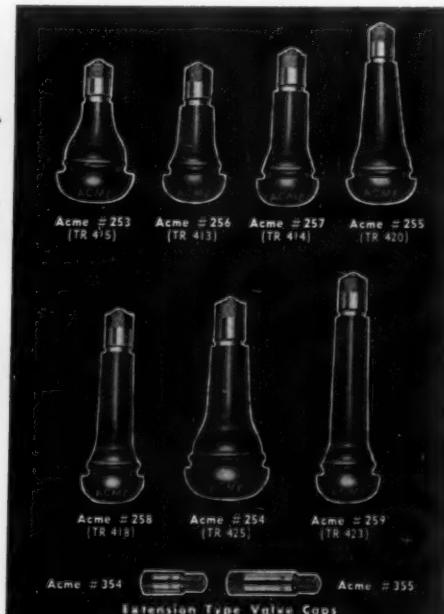


Executive Director James

ACME QUIK-MOUNT TUBELESS TIRE VALVES

100% Coverage
All Models
All Years!

Mount
Quickly and
Easily



NEWS ABOUT TUBELESS TIRE VALVES

Snap-in rubber covered Tubeless Tire Valves for all passenger cars including the new 14" and 15" rims.

Two extensions for access to the valve to facilitate air service. Threaded tops.

Universal Tubeless Tire metal Valves — Acme No. 251 to fit rims with oval and round $\frac{5}{8}$ " rim hole and Acme No. 260 to fit 14" and 15" tires with both .453" and $\frac{5}{8}$ " rim holes.

Both Valves are equipped with all necessary washers.

INSTALL A NEW VALVE WITH EVERY NEW TIRE

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ACME
for Accuracy
SINCE 1915

Today IGOA is steadily gaining momentum as it grows. The hard, diligent process of growing, which characterized the first four years of IGOA's expansion, had reached a climactic turning point where IGOA is selling itself. It needs only to have adequate leadership to explain and direct its course in the development of new units.

Since the time of the mid-year board meeting, six months ago, many new units have sprung up from all parts of the country, with others in the developmental stage.

In Missouri, St. Joseph has been completed, and with the able assistance of Art Kittell, first vice president of IGOA, they have made a good start. Temporary officers have been elected.

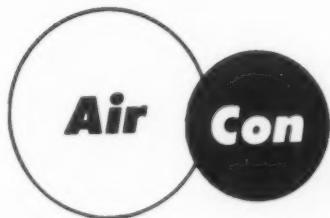
In Georgia, three new units—Albany, Tifton and Waycross—were formed in one week's time, a feat of the organizing "team" of Henry Clark (Unit Service Exchange), C. D. Bedenbaugh, Howard Viar and H. F. "Red" Reagin, IGOA president.

North Carolina: The state association of North Carolina is composed of a total of 22 units with approximately 300 paid members. North Carolina has set a record for greatest gain in membership and for greatest increase in number of units during the past year. North Carolina has been fortunate in having the strong leadership of Bryan Davis, its president, and the whole-hearted assistance of the wholesalers with their organizational activities.

In Alabama, three new units, Mobile, Tuscaloosa and Selma, have been completed and remitted dues.

Massachusetts: Springfield, Mass., is the result of a garagemen's meeting held in Hartford, Conn., and attended by garagemen from Springfield, Fitchburg,

FOR PROFITS IN AUTO AIR CONDITIONING SERVICE USE AIR-CON "FREON" 12



IN FACTORY PACKAGED
DISPOSABLE CANS
IT'S GUARANTEED PURE
IT'S GUARANTEED DRY

✓ INVENTORY CONTROL

Your parts department issues proper number of cans needed for charging each system. No loss from leaking cylinders, no loss from residual gas left in cylinders which is impossible to remove (average 10 lbs. or more left in large cylinders cannot be recovered).

✓ ACCURATE CHARGING

Ends guesswork in charging proper weights recommended by manufacturer of the air conditioning unit. No overcharging from faulty scales or sight glass charging.

✓ REMEMBER

There is no profit for you if you give the customer more "Freon" than you charge him for.
THE RESULTS — An overcharged system working improperly and **NO PROFIT FOR YOU.**

Mass., recently formed the nucleus of a new IGOA chapter.

Mississippi: Clarksdale is in the process of forming. The completion of Clarksdale will pave the way for a state association, Laurel and Jackson being the other two units.

Louisiana: Assisted by the Lake Charles unit and Joe Addison, Lake Charles president, Shreveport has been formed and has a membership of 29 garagemen. R. P. Richerand of Richerand Auto Service is promoting a new unit

in New Orleans. Lafayette is also organizing. This will make a total of four units in Louisiana and should make for a strong state association.

Washington: Dan Flannigan is president of the new unit in Seattle, composed of 31 members. Everett and Tacoma are in the developmental stage.

IGO-Spokane, sponsored by Don Drury, is going all out to develop a state association.

Pennsylvania: IGO - Somerset County has completed and re-

mitted dues for 12 members. Mercer County, assisted by members of IGO-Ohio, is in the process of forming. Pennsylvania also has Lancaster, Philadelphia and New Castle.

Texas: Dallas has been established. Ft. Worth's new chapter has 18 members. Organizational efforts are being made at Denton, Garland, Tyler, Irving and other cities in Northern Texas.

The three officers of Texas-IGOA, Fred Bethel, Bert Cook and Paul Darnell, are doing a fine job in promoting Texas-IGOA.

Wisconsin: Janesville has been formed and a good deal of organizational work is being carried on in other parts of the state.

Florida: The newly-formed state association continues acquiring new units. West Palm Beach has been added as unit #5. Plans are underway for adding Lake Worth as unit #6 and Delray Beach as unit #7. Here again, leadership, provided by Tommy Thompson, IGO-Florida president, and hard work on the part of many, have made Florida one of our most progressive state associations.

Florida Out-Emblems All

In ratio to its number of members, IGO-Florida has purchased more emblems for purposes of identification than any other state.

Montana: Billings—the first unit in Montana—was formed under the leadership of Norman Lively. Missoula has remitted dues for 24 members. Missoula was formerly a garageman's group who affiliated with IGOA.

Connecticut: As a result of its intensified organizational activities, Connecticut is contemplating a new state association in the near future. Manchester, Meriden and Torrington are in the formative stage. Connecticut is receiving a great deal of assistance from the jobbers. Al Previtali and Al Morris are "spark-plugging" the activity in this area.

Kentucky: A good deal of organizational work has been centered around Bowling Green, Louisville, Lexington and Paducah. Kentucky is also receiving the help of the wholesalers. Wilbur Jones, national director from Kentucky, is working hard to place his state in the limelight.

West Virginia: An embryo unit, consisting of 27 members, is the result of a concentrated membership campaign conducted in Charleston last April.

A garageman's group at Fair-

... and this tail pipe can't rust!

ALUMIBEND

Three times the life of
an original pipe because
of seamless, corrugated
aluminum construction!

Look how easily it
shapes to match any
ready-bent tail pipe
. . . even a girl can
bend ALUMIBEND by
hand, no tools needed!
. . . and it can't rust!

Get in the money-
making tail pipe
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Always have the right tail pipe *on hand* with the ALTP-6 Display Assortment! Just 6 ALUMIBEND Tail Pipes will handle replacement jobs on over 90% of cars and trucks. Pipes store straight in just 2 feet of space. You make \$24.40 plus installation profits. Order from your Everhot jobber today!



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Don't be HALF a MECHANIC

NEW! For 1959-'60
FORDOMATIC 2-Speed
Transmissions... Reverse
Band Adjusting Tool with
pre-set torque mechanism
and gauge spacer.
Assures accurate adjust-
ments to car manufacturer's specifications.



If you don't have the Tools and the know-how to service and repair Automatic Transmissions today, you are only getting half the job done and probably cutting your income in half, too! Complete *your* service abilities with Automatic Transmission know-how. This new FORDOMATIC BAND ADJUSTING TOOL is only one of the many we will show you how to use that will quickly put you into this profitable service all the way. Ask us about it!

New Britain
HAND TOOLS

THE NEW BRITAIN MACHINE CO.
NEW BRITAIN, CONN.



mont has shown interest in forming an IGO unit.

Ohio: A general expansion program in Ohio has resulted in three new units: Lake County, Chillicothe and Ashtabula.

As a public relations feature of their program, the members of IGO-Ohio have included the displaying of outdoor identification signs and have purchased a total of 160 signs in the past three months.

California: California has established new units in the northern

part of the state. California continues to lead other state associations in membership and in total number of units.

South Dakota: Owing to the promotional efforts of a jobber in South Dakota, G. A. Young of Lake Andes Auto Supply, meetings were scheduled for the month of April. Up until this time, there has been little or no interest shown in IGOA in South Dakota.

South Carolina: The state association of South Carolina is a progressive one. There has been a

great deal of organizational activity and program development within the four units of Charleston, Spartanburg, Columbia and Greenville.

Iowa: In addition to its active development of programs, Iowa has two new units, Marshalltown and Carroll, in the formative stage.

Illinois: Decatur, Belleville, Quincy and Rock Island County are newly-developed units in Illinois. Two additional units—Aurora and Champaign-Urbana—are in the process of forming.

An intensified membership drive was mapped out for IGO-Chicago whereby Chicago would be divided into a multiple-branch unit, each branch to be presided over by a vice president. This plan is believed to be the best solution for large population areas such as Chicago.

Mel Turner has stimulated the action and paved the way for the development of his home city of Chicago, and in the near future Chicago should be our largest IGO unit.

Where Associations Pay Off

Progress has become a natural aspect of American industrial life. Associations make it possible for individuals to take advantage of opportunities within their industry and to develop programs which make progress possible.

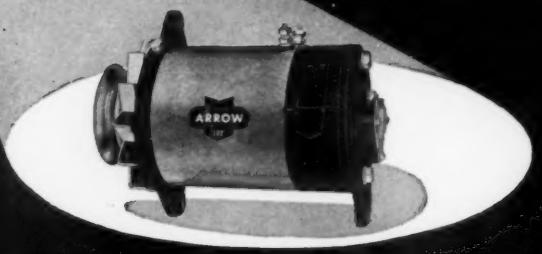
Advancements have been made by several states, who, having acquired a large membership, have been active with the development of worthwhile programs. **Arizona**, **Georgia** and **Colorado** have promoted a lien law in their respective states.

On the basis of evidence collected by IGO members and presented by Harold Grindle of IGO-Ohio to the Kefauver U. S. Senate subcommittee, a bill, known as H. R. 4256, has been introduced in the house by the Committee on the Judiciary and its anti-trust subcommittee, requesting that manufacturers of motor vehicles abstain from financing and insuring the sale of their products.

This bill is a supplement to the anti-trust laws, and is of special significance to the body shops, who have been directly affected by such "captive financing."

The IGOA apprenticeship program has been placed into operation and is functioning effectively in many local units in the states of **Ohio**, **Georgia**, **Kansas**, **Colorado** and **Louisiana**. In **Wisconsin** and

How do you recognize an "honest product"?



Even an expert can't distinguish between the products of different manufacturers without completely disassembling and testing each component. Because this is impractical, buyers have learned to accept a company's reputation as the most reliable guarantee of an "honest product".

However, if you actually did take apart an "honest product", you would find materials and components which meet specifications and engineering requirements in every respect.

If you could look into the way the product was made, you would see modern precision machinery, conveyorized lines, quality control stations and final operating tests of the finished product.

And if you could visit Arrow's three facilities, you would see all of these things. You would see that Arrow rebuilds automotive electrical components only and has developed specialized machines and methods for every important operation.

Arrow's specialization and standards of quality have earned our company a reputation for building honest value into every product.

For more information, write for Arrow's 12-page booklet, "How Good is a Rebuilt Generator?" This booklet is available without charge to jobbers and service shops east of the Mississippi River.



ARROW ARMATURES COMPANY
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Only
GATKE
Offers
These
Exclusive
Features

...means more
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When you install

Customers will pay your price for the exclusive safety features of patented Gatke Grooved Brake Lining.

After you install

Costly free adjustments eliminated. Releases shop space for more brake jobs. Creates a double profit opportunity.



The All-Weather
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FAR BETTER 4 WAYS

DRIES

COOLS

CLEANS

SEATS
QUICKER



**The most complete line in the industry
...the most respected name for quality**

It pays to go all the way with the complete Gatke line. You don't have to settle on the uncertainties of a second-best line to round out your service. Ask your jobber how you will profit more with Gatke brake lining products.

Massachusetts Plant

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Originators of Automotive Molded Brake Lining

North Carolina, the adult vocational schools are working with the state associations in setting up mechanical training schools.

The IGOA program of the voluntary registration of mechanics, approved at the mid-year board meeting in Tulsa last January, has made considerable progress and is now in the final stage of completion.

The application and testing of mechanics is performed at the local level. It is passed upon at the state level and administered at

the national level.

By upgrading and increasing the mechanical and technological standards of our trade, we automatically provide greater "job opportunity" for the young men entering our industry. This, in turn, provides for further development and greater progress of our industry!

In conjunction with the fifth annual convention, the "IGOA Signs of Progress" theme has been well-emphasized by the wide distribution in the Southeastern

states of red, blue and white highway signs, 4' x 6' in size. A special feature of this promotional plan is the purchasing of these signs by wholesalers, members of Booster Clubs and AAR for distributing to local IGO groups, who are erecting them along the highway.

To IGO-St. Louis, Missouri, goes the credit for designing and developing this highway sign.

This sign has been adopted as a national program, and is the most significant cooperative advertising media of IGOA history. The cost of these luminescent highway signs is \$15 each, F. O. B. They must be ordered in pairs.

It is our desire to see these signs erected throughout the United States, pointing the way to all IGO garages, wherever they may be.

IGOA Lifts Standards

Across the nation IGOA garages are rapidly becoming recognized outlets for dependable repair service. This is no small achievement. IGOA is an example of the merchandising advantages a group can acquire for themselves by following a "select" plan of endeavor, and by setting their standards on a par with their advertising claims: by having the goods and being able to deliver them. This is the reward of establishing a reputation for "dependability."

During the past three months IGOA has gained six new allied members; World Bestos, Sun Electric, Automotive Service Digest, Motor Master, Arrow Armatures and The Electric Autolite Co. Our thanks to these independent manufacturers for their active contribution toward the building of IGOA.

We want to express our gratitude, also, to our many friends among the trade press, who have so generously abetted the cause of IGOA.

Aside from these visible signs of progress, there are other indications that IGOA is "growing up." Its members are becoming more aware of their responsibility to their association and to each other. This is one of the most impressive signs of our maturity. Whereas in the beginning an IGO member wondered what he could get out of the association, he is now more concerned with what he can give to add to the whole. We are very proud of this change in attitude. For the time an association really begins to grow is when its members give of their time and effort

Year-round profit makers from MONKEY GRIP



MONKEY GRIP DUAL PURPOSE PATCHES

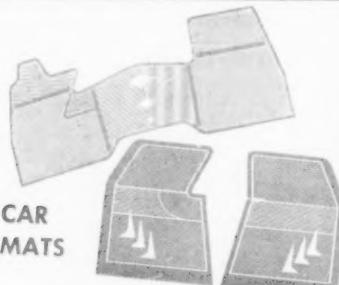
Self-vulcanizing tube and tubeless tire patches in protective dispenser cartons. Shop kit metal cabinet contains patches, rubber solvent, buffers and stitcher.

WORLD LEADER IN
RUBBER
AUTOMOTIVE
PRODUCTS



MONKEY GRIP FRICTION TAPE

Cellophane wrapped rolls. Counter display packaging in colorful cartons and rack stands.



Monkey Grip offers a complete line of car mats in finest quality rubber, smartly styled and perfect fitting.



"SIZZLE" PATCHES AND CLAMPS —for tube and tubeless vulcanizing repairs.



The reliable and most profitable tire repair method! "Off-the-wheel" repairs are sure and safe, and lead to extra sales and service jobs.

Complete, fully illustrated catalog upon request.

MONKEY GRIP SALES CO.

P. O. BOX 6170 • DALLAS 22, TEXAS

unselfishly for a cause that serves many.

The future of IGOA looks very promising.

Perhaps it is because of the early discouragement and trying to hurdle the many obstacles that my personal satisfaction in the growth of IGOA is so great. For how else could I appreciate our attainment?

IGOA's growth today is the direct result of cooperation and teamwork among its members. The future rests with each of you, for each individual member among you is a part of this chain reaction.

The progress we have made during the past five years should stimulate each of us on with greater effort—to greater Signs of Progress!

Chevrolet Moves Kilgore

A. R. Kilgore has been promoted from assistant zone manager of Chevrolet Motor Division in Baltimore to city manager, Philadelphia, according to General Sales Manager K. E. Staley. This was one of a series of field staff changes announced last month.

Black & Decker Sales Set Six-Month Record

IN THE first half of its 50th year, The Black & Decker Mfg. Co.'s consolidated net sales totaled \$28,763,487, which was \$4,490,268, or 18.5%, greater than the same period last year and the highest for any similar period in the company's history, according to Robert D. Black, board chairman and president.

Net income for the six-month period was \$2,797,420, representing an increase of \$741,970, or 36%, over earnings for the first half of 1959. The company's net worth at the end of the period was \$39,690,179, an increase of 12.9% over the March 29, 1959, figure.

Timken Co. Elects Timken President

W. R. TIMKEN has been elected president of The Timken Roller Bearing Co., succeeding D. A. Bessmer, who resigned because of ill health.

Starting with the company in 1935, Timken was elected a director in 1936 and a vice president in 1941. He served on the finance,

executive and policy committees of the company before his election in March as acting president.

American Motors Corp. Promotes Layton

J. LAYTON has been promoted to parts and service manager of the newly-created Southern region, which includes the Atlanta, Houston and Memphis zones.

A 20-year automotive veteran, Layton for the past five years has been parts and service manager of the Atlanta zone and will continue to headquartered in Atlanta. He joined the company in 1949 as a parts and service representative in the Memphis zone and later was a district manager, parts and service merchandising manager and technical service manager there.

Tarheels Pick Bruton

C. Glenn Bruton of B. & B. Motor Co. has been elected president of the newly-formed Montgomery (N. C.) County New Car Dealers Association. Vice president is Al Lincoln of Al Lincoln Buick-Chevrolet, Inc., and Herbert Fox of Fox Garage is secretary.

**NEW
Profit
Maker**

STRINGFELLOW

"MUSTANG" POWER WRECKER

Now With One Lever
Remote Control . . .

The MUSTANG is unsurpassed for profitable Wrecker Service. It has built-in power reserve (Winch) tested up to 21,000 lbs. pulling capacity.

Ideal for $\frac{3}{4}$ and 1-ton chassis. Easily installed in standard pickup bodies. Other models of the same type available for chassis through 26,000 lbs. G. V. W. rating.

Write today for catalog, descriptive information and name of jobber nearest you.

Manufactured by

**W.T. STRINGFELLOW
& CO. INC.**
125 • 12th AVENUE, NO.
NASHVILLE 3, TENNESSEE

TWIN BOOM WRECKERS

4 models ranging from 8-ton through 40-ton rated pulling capacity

← MODEL DBS-12

Rating 12 tons . . . ideal for 2 and $2\frac{1}{2}$ -ton chassis

SOUTHERN AUTOMOTIVE JOURNAL for May 1960

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143

Colbert Admits Dodge To Offer Compact

DODGE will offer a compact car as part of its 1961 line this fall, President L. L. Colbert of Chrysler Corp. admitted last month at the annual stockholders' meeting in Detroit.

Colbert also said sales of the Chrysler-built passenger cars had climbed steadily since the first of the year, when the company's market penetration was 14.4%, to a March penetration figure of

16.1%.

He told the shareholders that the company's financial results have also "shown an encouraging change of direction" since the fourth quarter of 1959 when Chrysler Corp.'s production was crippled by steel shortages.

In revealing for the first time a second compact car to be marketed by Chrysler Corp., Colbert said, "We have moved into the dominant and growing sector of the automobile market with products that are demonstrating strong cus-



President Colbert

tomer appeal.

"We have realigned our dealer organization to build greater volume potential into each dealership. We have developed another attractive compact car that will be brought to market by our Dodge dealers with the introduction of our 1961 models."

Chrysler Corp.'s moves to maintain its strong competitive position and take advantage of new market conditions are keyed to the volume sector of the market, Colbert said.

The Valiant and Dart passenger cars, he said, were designed to increase the company's offerings in the low-price field and thus improve volume potential.

During the first three months of 1960 the combined sales of Plymouth, Valiant and Dodge Dart accounted for 12.3% of the market he said. This exceeded the highest sales penetration scored by Plymouth alone, since the end of World War II, which was 11.7% in 1946. In 1958, the last full year in which Plymouth represented the company's only entry in the low-price field, Plymouth's sales penetration amounted to 9.1% of the market.

Elaborating upon the increasing importance of the lower-price sector of the domestic automobile market, Colbert told the shareholders the domestic cars in or below the Dart, Plymouth, Ford and Chevrolet price class, including all of the compacts, have accounted for 72% of all new-car retail sales so far this year. For the year 1959, the cars in this price class accounted for 69% of the market, and back in the early 1950's these cars accounted for only slightly over 50% of the market.

"Although no certain conclusions can be reached about the dynamically changing kind of market we have at present, the facts do seem to indicate that the cars in the low-price range will continue their



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a battery—or sell a charge...both are done
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It will pay you to ask for further information and a demonstration
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CHRISTIE CONSISTENT HIGH QUALITY is undisputed in the field.
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American Hammered's stainless steel oil ring controls oil better, even in tapered and out-of-round bores, than rings made from ordinary steel. You'll find it superior for these five reasons—needs no back-up spring or shim stock • resists sludging and corroding • maintains tension under extreme heat • fast break-in • easy to install. *Positively* controls oil . . . stops oil pumping and smoking.

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Automotive Replacement Division • Muskegon, Michigan
A Division of Sealed Power Corporation



Stainless steel
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present domination of consumer preference," Colbert said.

He said that the demand for cars powered by the company's new six-cylinder engines is so heavy that employees are working on a three-shift, around-the-clock basis. This means the company is manufacturing six-cylinder engines at a rate of more than 600,000 a year.

"But even this is not enough to fill the demand," Colbert said, "and we are now preparing another engine line."

"Functionalism with Thrift" Accents Future Cars, Cole of Chevrolet Feels

By EDWARD N. COLE

General Manager, Chevrolet Motor Division

THE theme of the 1960's will be functionalism with thrift. Styling will be simple and unadorned. Annual model changes will not involve massive and exotic changes,

but will consist generally of refinements to improve the products and give the customer greater dollar value.

Cars will probably get shorter, maybe a little higher and much lighter through use of several lightweight metals. They will be easier to get into and out of—and will have more room for passenger comfort and trunk space.

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"Whis-purr" quiet muffler
that stretches fuel dollars, lasts longer
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**PRICED
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A model to fit every car.

ALSO complete lines of Chrome Side Pipes and Lakes Pipes plus Dual Exhaust Systems

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AUTOMOTIVE PRODUCTS

2055 North Ruby Street • Melrose Park, Ill.

Excerpts from an address May 7 before the annual convention of the North Carolina Automobile Dealers Association at Pinehurst—the first before a state dealer association meeting in the South.

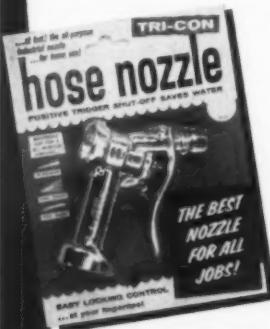
Don't look for any new powerplant to replace the conventional piston engine in cars during the next decade. Gas turbines may be used in trucks, particularly for long-distance hauling, but we are still a long way off from the gas turbine car—or, for that matter, one which rides on a stream of air or on the electrical discharge of a fuel cell. The piston engine, however, will become a much more efficient powerplant — as will transmissions and other components—due to continuing refinements and improvement. . . .

Through the magic of electronic data processing equipment which gives us daily reports on what customers are buying from dealers and through extensive research and market studies, we plan and project consumer trends. But it is still mighty difficult to put a cus-

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FULL AIR POWER Double Bead Breaker has wide circle, "Rolling Action" breaker shoes powered by big air cylinder to break tightest beads, 12" through 17½".
MANUAL Mount-Demount is easy with Bishman double-end tool that won't scuff, mar or cut bead or air seals.

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Ask your Equipment Distributor for demonstration or write direct.

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MAGNETIC TIRE SHIELD

Fits Any Size Wheel • Quick, Neat Paint Jobs Every Time without Masking. \$3.95 Each • \$14.95 Set of 4

Order Set, receive 6 FREE "FLEX-CUT" WONDER PADS, a New Tool for Hand Sanding. Offer good for limited time only. Order from Jobbers or write direct.

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Ask These 221 Men To Prove...



You, Too, Can Earn \$10,000 A Year As Your Own Boss In Your Own Business—

That's a bold offer... but we have the figures of their success stories — the proof-positive story of EVERY owner in the great Dairy Dan Family in 23 states and Canada. Better still, you can start your own business... or take a test ride with any of them over their own exclusive route territory. Watch the dimes, quarters, half dollars roll in. See why Dairy Dan is the best seller with the best equipment... the finest, most complete mobile soft ice cream unit on the road today!

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\$18,000
my first 9 months
**SERVICING
RADIATORS!**



Harvey Jones Company, Reseda, Calif., says: "Radiator business was new to me until I opened my shop. In the first 9 months, I grossed \$18,000! This was due to my fine Inland equipment, plus the instructions and sales aids received at your school!"

There's a real radiator-servicing opportunity in your area right now. Every auto-truck-tractor owner is a prospect. Inland, world's largest radiator servicing equipment mfr., offers equipment, Pays-for-Itself purchase plan, and free training.

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CITY _____

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If dealer, make of car sold _____

Are you now operating a radiator dept.? Yes No

tomer on an IBM card and predict what he will want in a car two or three years from now—such as styling, design concept, body style, color of exterior, engine power and a hundred other detailed specifications which go to make a complete car....

While products are very important, let us not forget about another significant challenge we face in the future: the new consumer of the 1960's. We must recognize that we are dealing with a consumer who is vastly different

from his counterpart of the 1950's. The dealer who handles his customers on the theory that "a fool and his gold are soon parted" is in for a rough time.

The average consumer of the 1960's will be progressively better educated, more sophisticated and more discriminatory. He knows what he wants in a car and he will expect value for his purchase. His choice of places to spend his extra dollars has never been greater, and it will take a much better job of salesmanship to win his mone-

tary favor. Let's face it: The customer is in the driver's seat and is likely to be there a long time.

As far as the automotive industry is concerned, I don't think any of us has to be convinced that it is a highly competitive business, or that it is sure to become even more so in the years ahead.

If we needed to be reminded, all we would have to do is remember that—in addition to the established American makes—we now have 76 foreign cars being sold in the United States. And during the past seven months, American manufacturers have added five new lines of cars, with the speculation of more yet to come.

As a result, our market is in an unusual transition period. While the 1950's were devoted largely to upgrading our lines and producing more car for more money, we are now also doing our level best to produce less car for less money while retaining the basic dollar value of all these products.

In effect, what we are doing is to put a new, lower price base on the line-up of American automobiles. We are also offering the American public the widest choice of models, design concepts, car size and price in history.

All of the new models—the Corvair, Falcon, Valiant, Dart and Comet—have been well received. Their first year sales, in fact, will probably run between 1,100,000 and 1,200,000 units.

There is no doubt that these new models have aroused the imagination of the American public and stimulated new buyers into the market. But it is also true that many of their sales are coming at the expense of traditional models and anticipated sales of imports.

Two results seem obvious. One is a sizable attrition among the 76 foreign cars being sold in this country and a leveling off of total import sales. The second is that there may be some realignment of traditional American makes during the next few years.

Wheel and Rim Moves Office to Florida

OFFICES of the National Wheel and Rim Association have been moved from St. Louis, Mo., to Jacksonville, Fla.

Warren A. Birt of the latter city is president and B. H. Thomas, formerly with Birt's firm, is the full-time executive secretary of the association.

The Jacksonville address is 1032 Hendricks Ave.

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to build
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You'll find KIMCO Bonded Brake Shoes a mighty profitable, easy-to-sell line. They're top quality throughout, with super-tough bonded lining for greater mileage, greater safety. Special bonding agent . . . full molded lining . . . and perfect shoe alignment.

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Engine Rebuilders Will Spotlight "Markets" Panel at June Meeting

"TAPPING New Markets," a panel discussion scheduled for the 38th annual convention of the Automotive Engine Rebuilders Association, will be moderated by Past President P. J. Sawyer of East Alabama Auto Parts Co., Anniston, Ala.

Set for June 1-4, the meeting will take place at the Netherland Hilton Hotel in Cincinnati.

Besides the panel discussion, the program on Thursday will include an address by President F. C. Bradley, Jr., of Connecticut Bearings Co., New Haven, Conn., and remarks by Executive Vice President James H. Templin. A. H. Jensen of Sealed Power Corp., Muskegon, Mich., will speak on "Abrasive Wear—Identification and Prevention," to be followed by Frank Schmitt of Dallas, Texas, on "Meeting Fleet Problems."

Panel members will be George W. Yount, AERA treasurer, Eagle Machine Co., Indianapolis, Ind.; J. C. Pippenger, Ingenieria de Combustion C. A., Caracas, Venezuela; Richard S. Love, AERA first vice president, The Love Machine Co., Inc., Salt Lake City, Utah, and H. B. Eldridge, AERA director, Universal Parts & Service, Inc., St. Louis, Mo.

Manufacturers to Entertain

A manufacturers' cocktail party is scheduled for the evening.

Speakers for the second general session on Friday, June 3, include Hans W. Fellberg of Triangle Engine Rebuilders, Chicago, on "Cylinder Head Rebuilding at a Profit;" Walter E. Thill of Federal Mogul Service, Detroit, on "What's New in Bearings;" Fred A. Lambert, AERA past president, Lambert Co., Ltd., Los Angeles, on "How to Sell Your Machine Shop Service;" R. J. Anderson of Kitchener Auto Parts, Kitchener, Ontario, Canada, on "How Not to Operate a Shop," and Henry Ortner of American Bosch Arma Corp., Cleveland, O., on "The Future of Diesel Fuel Injection."

Leonard Connett, AERA past president, Piston Ring Service Co., New Orleans, La., will reveal his latest "shop kinks."

The annual banquet will take place in the evening, after an afternoon manufacturers' conference period.

An open forum of technical questions and answers, moderated by J. Leonard Love, AERA past president, The Love Machine Co., Salt Lake City, will lead off Saturday's program. The general session that day, presided over by Past President Morrill Palmer of Trackman Auto Supply Co., Joliet,

Ill., will hear addresses by Peter E. Casey, AERA director, Motor Service Co., Worcester, Mass., on "Align Boring," "How to Operate a One-Man Shop" by Ralph Silverman of National Auto Supply Co., East St. Louis, Ill., and "Break-In Procedure" by Charles E. Carr of The Aberdeen Motor Supply Co., Cleveland, O.

An engine demonstration on "Ignition and Detonation Problems" will be presented as a feature by Champion Spark Plug Co., Toledo, O.

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Today, these fine quality, British-made favorites are found on almost any make car. They're so popular because of their sharper viewing, smarter styling and heavily coated chrome finish.

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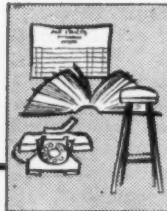
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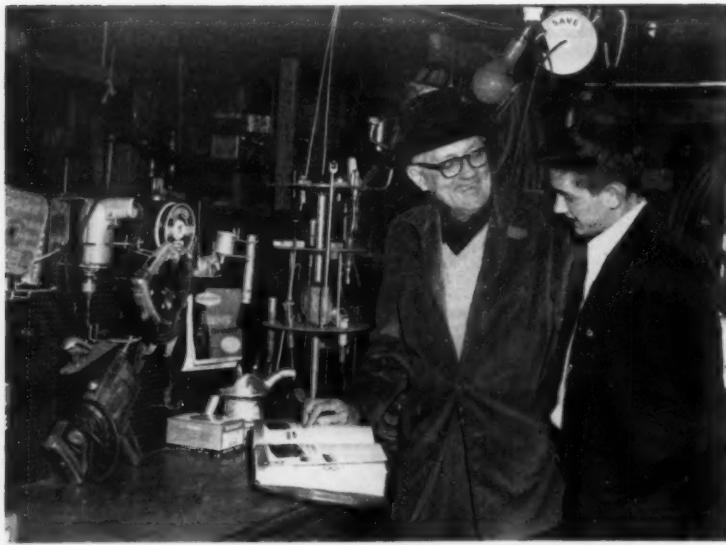
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SOUTHERN JOBBERS and FACTORY MEN



There's shop talk often between this well-known Texan and his son.

Johnny Eyes Your Job

By BARON CREAGER
Southwestern Editor

JOHNNY Garrett is a jobber salesman whose earnings sometimes amount to as much as \$14 in two weeks.

But that was an unusual period, that two weeks referred to. In addition to selling some parts, he also did some mechanic work, installing the parts for the customers. For such work he charges a modest fee.

For example, one of Johnny's customers had Johnny buy a certain carburetor and, thereafter, Johnny installed the carburetor for \$3. Modest fee, indeed!

"Does he charge enough for his shop work?" That question was put to Johnny's father, T. C. "Buddy" Garrett, head of the

Automotive Division of The Schoellkopf Co., Dallas, Texas. "Buddy" snorted with extreme disgust.

"Shucks, no!" he moaned, and dolefully moved his head in the negative orbit. For "Buddy" is a veteran of automotive wholesaling in the Southwest and is widely known for his liking to see merchandise move fast—and for getting out of that movement all available profit.

But, although it pains "Buddy" to see someone get something for less, Johnny's net earnings are not all-important. For Johnny is getting some early training in automotive wholesaling so that he will be prepared to go into the business

for bucks if so inclined after college. "Buddy" makes no secret of the fact he hopes Johnny will be so inclined.

"Who knows," says "Buddy." "Maybe Johnny and I will be in business on our own some day."

"But college comes first. As of now, Johnny says he wants to take mechanical engineering in college. That's all right. He can take whatever he wants in college."

"But," he added, staring off into the distance at a spot on the living room wall of the Garrett residence, "you can't tell about a boy when he is only 16 years old. He may change his mind."

Lillian, his wife, cast an identical vote. "We really hope he will go into the automotive wholesaling business," she said.

If he does, Johnny should be well prepared by that time. He might be called an early riser in automotive wholesaling for he is ahead of normal expectation at 16 years. Precocious is the word.

Last summer, at 15, Johnny worked through the vacation months at Schoellkopf's as an order filler and counterman. He works some on Saturdays through the winter when extra help is needed to handle a shipment of merchandise. Otherwise, his studies as a high school sophomore keep him occupied.

Says Johnny's father, with pride: "Why, he can read a catalog better than some of our regular men."

So, when school separated Johnny from his regular job at Schoellkopf's, he carried home an abbreviated version of a catalog. There is a deal whereby Johnny is paid a certain commission on sales, although he doesn't work a big territory. He knew he could make some sales and he knew he wouldn't need to leave home to do it. He is president of the "Eight Ball Hot-Rod Club," with eight members, and headquarters is Johnny's small "shop" in the Garrett garage.

Therefore, most of his customers are members of the club, with a



Four members of the "Eight-Ball Hot-Rod Club" and trophies won at drag races are (l. to r.): Jim Thompson, Johnny Garrett, president; Jimmy Stiff and Jack Myers. Sixteen-year-old Johnny has been delving into many angles of the aftermarket and may become a wholesaler.

somewhat widening circle of other hot-rodders. But, mostly, Johnny sells parts and does that mechanical work so that club members may accumulate more trophies at drag races.

"He charges them just about what the traffic will bear," said "Buddy," referring to Johnny's shop work.

Only four members of the club were allowed to pose with the trophies for a picture. Six mem-

bers were present, but two of them were not wearing the club jackets.

So, when school is out there is usually a congregation of young hot-rodders around the Garrett garage and this, obviously, is not discouraged by either parent, there already being a record that both would like to see him in the automotive field at maturity, and preferably in wholesaling.

And, although there is no obvious application of pressure by the Garretts now, there has been "atmospheric" pressure all of Johnny's life. When he was born, "Buddy" and Nick Carter operated Auto Parts Co. in Dallas. Since then, "Buddy" has been head of the Automotive Division in Dallas for Straus-Frank, has been a partner with Joe Ashby in Ashby-Garrett Auto Supply and has operated his own business, Buddy Garrett Auto Supply. He is a past president of the Southwest Automotive Show, Inc., and served on the show committee for the 1960 show held in March.

Therefore, although Johnny may not have actually cut his teeth on a piston ring, he grew up in automotive parts stores and in the automotive aftermarket atmosphere. Perhaps "Buddy" thinks it is in the boy's blood, for "Buddy" is prepared to take Johnny into that business when the time comes.

"Like I say," he mused, "you can't tell about a boy when he's 16 years old. He might change his mind about mechanical engineer-

A special plaque containing a gold-plated stoplight has been awarded Brake Service Co. of Charlotte, N. C., commemorating that firm's sale of the one-millionth truck stoplight for Arrow Safety Device Co., Georgetown, Del. R. C. Wilkinson (left), president of the Tarheel company, is shown accepting the award from D. W. Ogilvie, general sales manager of Arrow.



The host and guest speaker greet each other at the recent exhibit booth meeting called at Richmond, Va., by Dave Cody Associates, Inc., veteran manufacturers' representatives and warehouse distributors. President David C. Cody (left) is shown speaking with Martin E. Goldman of Aitkin-Kynett Co., Philadelphia advertising agency, who appeared with the compliments of Wilkening Mfg. Co. Jesse F. Jones, Jr., executive secretary of the North Carolina Automotive Wholesalers Association, also spoke. Seventy manufacturers staffed booths. The 256 people attended a reception and banquet at the Country Club of Virginia in the evening.

ing.

"When he gets out of college I'll be an old man, too old to run a store by myself, but I could run one with Johnny. And I'll be ready.

"When I sold the Buddy Garrett Auto Supply, I let the new owners use the name for a year. Then I withdrew the name, I own it. It is registered in the U. S. Patent Office, just in case I want to use it."

Arkansas Sets June 14 To Organize State

AN ORGANIZATIONAL meeting of jobbers in Arkansas is scheduled for noon June 14 at the Hotel Marion in Little Rock.

Speakers will include Tom Payne, executive secretary of the Automotive Wholesalers of Oklahoma, Richard A. Melvin of Automotive Service Industry Association, and a jobber. Benefits to be derived from state organizations will be the theme.

All wholesalers in the state—whether members of regional, municipal or national associations—are invited.

Nearly a score of state groups are now functioning.



New or renamed officers of AWO include (l. to r.): seated, Tom Payne of Okmulgee, executive secretary; D. Wayne Sledge of Auto Parts and Equipment, Duncan, president; George Roysdon of Tulsa, retiring president; W. J. Wing of Guymon, secretary-treasurer; standing, directors Corwen Robinson of Clinton, Jack

Rodden of McAlester, Joe Owens of Enid, Tom Williams of Bartlesville and Ben Lewis of Lawton. Absent at the time of the picture taking were Howard Thomas of Pryor, new vice president, and directors Vernon Ingram of Ada and Tom Moxley of Oklahoma City. The association membership is now well above 200.

Redistribution Laws Coming, Toft Tells Oklahomans

DRASIC legislation to control redistribution is inevitable, Victor L. Toft told the sixth annual convention of the Automotive Wholesalers of Oklahoma, convening April 23 in Oklahoma City.

The industry is unwilling to regulate itself, so regulation will be forced upon it, he said.

"Unless something is done about it," Toft continued, referring to the existing maze of channels in redistribution, "we might see redistribution totally abolished, or made so unattractive that it will lose its appeal.

"There are appalling cases of dishonesty. This situation is the result of betrayal on a wholesale scale by both manufacturer and wholesalers. Economic chaos will inevitably come unless our industry sees that this job is done."

Toft, first president of ASIA, but speaking as vice president of The Sidles Co., Omaha, Neb., had first declared that the industry has passed out of "the fumbling 50's" and called that terminology "uncommonly fitting when we talk of our industry, for there has been so much confusion." Immediately thereafter he referred briefly to the recently-concluded United Motors-Firestone pact.

"Today we face a test," he added, "of how to make competition the life and not the death of

trade." Then he discussed "impairment of free competition" from three viewpoints—major oil company marketing policies, lack of a united front within the industry and redistribution which, he said, is "honorable and necessary until it is prostituted."

Following this principal address, the association unanimously adopted a resolution declaring that he, as president of ASIA, "delivered the industry out of the wilderness and put it on a sound pathway." Another resolution supported H. R. 9893, 94 and 95 introduced by Representatives James Roosevelt and Tom Steed, the latter representing Oklahoma in the national house.

In his annual report Tom Payne, executive secretary of AWO, said that with 221 members—"compared with our puny beginning"—the association had just completed its greatest year, had "done more things and had more fine publicity and the treasury is doing all right." Mechanic students to the number of 405 had been trained in either automatic transmissions or tune-up and the association will probably add a course in front-end and brakes, he said.

Max K. Doebler, Jr., assistant manager, Bruce Dodson and Co., Kansas City, spoke to the afternoon session. Another address was scheduled by Ray Page, state safety commissioner, but illness caused an aide to sub for him.

Tarheel Body Will Pick "Mr. Booster 33"

MEMBERS of the North Carolina Automobile Wholesalers Association, in cooperation with Booster Club B-33, have been asked to select "Mr. Carolina Booster 33" of 1960.

"Mr. Booster" will be announced and presented with a trophy at the seventh annual convention of NCAWA to be held June 17-18 at the Morehead Biltmore Hotel, Morehead City. B-33 works closely with NCAWA.

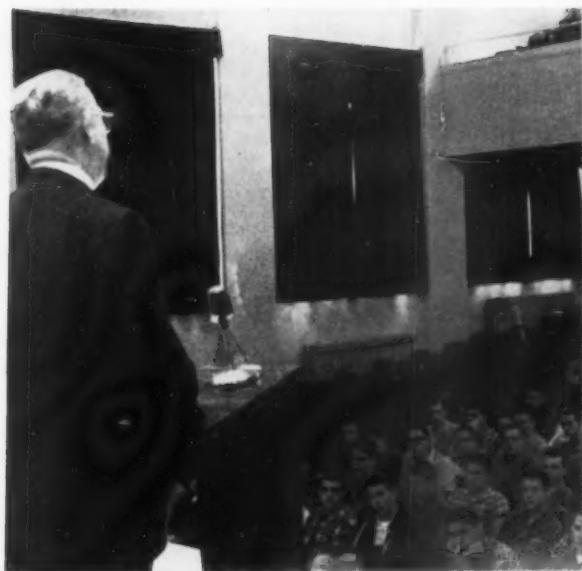
Bailey Dies in Macon, Ga.

William J. "Bill" Bailey, 63, president of Bailey Auto Parts Co., Macon, Ga., died last month. A native of Hawkinsville, Bailey had lived in Macon 35 years. He established his company there in 1930.

Texan Buys Gainesville Store

M. R. Walker, owner of Sherman Auto Parts of Sherman, Texas, has purchased Gainesville Auto Parts in Gainesville, Texas, which he will continue to operate under the same name.

Dowgard cooling system fluid has been added by **Womwell Automotive Parts**, Lexington, Ky., according to P. W. Shaw, purchasing agent.



P. J. "Pete" Sawyer, Anniston jobber, told the sophomore class of Anniston High School last month about the opportunities awaiting them in this industry.



Mrs. Elizabeth Screven, teacher-coordinator at the school, shouldered the training program last September—before any definite program had been drawn.

Alabama Reaches to Schools for Help

ALABAMA's wholesalers have inaugurated a program aimed at curing what has been termed the biggest problem facing them today: lack of adequately trained personnel.

A long-range plan has been worked out by the Automotive Wholesalers' Association of Alabama in conjunction with the Alabama Department of Education, Vocational Division, and a highlight is the pilot training opened last fall in the high school at Anniston.

"No program of upgrading present personnel would suffice," officials of AWAA said in a statement. "No effort was made to discredit this important phase of the training program, but standing alone it would not meet the needs for the future because:

"1.—A survey revealed that the jobbers themselves did not feel that they had a sufficient number of the type of employees who would be willing to go to school at night to make the program feasible.

"2.—Such a program could only be practical in the larger cities where there could be found a sufficient number of employees to have the program. A minimum of ten would be essential.

"3.—Such a program would not give any continuous flow of young people into our growing and expanding industry."

The association's leaders then turned to the state education authorities, who are set up to combine specialized school work with on-the-job training for the stu-

dent-employee. The selected subjects were actually written by industry authorities, augmented by business arithmetic, spelling, English, handwriting, etc.

Last month the sophomore class of Anniston High School heard P. J. "Pete" Sawyer of East Alabama Auto Parts, Anniston, cite the op-

Shown here with the student-employee, Leldon Fordham, who works part-time with him, P. J. Sawyer has been pleased with the program.



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Carpet textured AUTOMATS

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GREEN
GRAY
BLACK

MATCHING REAR AUTOMATS

Boost your sales with rear
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REPLACEMENT FLOOR MATS in **COLORS**

These beautiful front floor mats are setting sales records, because they have a deep pile texture resembling the nubby yarn of thick, soft, beautiful carpet. They are actually tough, easily cleaned, resilient rubber. NO CUTTING! NO SLITTING! SURE FITTING! Molded to exact shapes of car floors.



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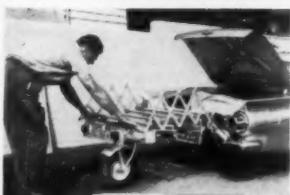
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FOLLOWS like a shadow at highway speeds!

FOLDS to golf bag size when not in use.
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AWARD MFG. COMPANY
660 WEST 17TH STREET • COSTA MESA, CALIFORNIA

portunities awaiting students interested in selecting automotive parts wholesaling for their career. Three students have been working part time with three of the Anniston jobbers, backing up their book learning with actual experience, for which they receive reduced compensation.

"I think we can provide manpower not only for jobbers but for car dealers as well," said Sawyer, a past president of the Automotive Engine Rebuilders Association and of AWAA.

"The jobbers of this country have done the poorest sort of job of selling their own industry, so that many people don't know much about us and what we are doing. For example, a friend came into my machine shop the other day and he wanted to know what we were doing with all that machinery. People just don't know who we are, hence it's more difficult to sell someone on the idea of coming into this business."

How Many Workers Needed?

How many desirable employees could the jobbers of Alabama absorb?

"Anniston jobbers could absorb five to ten men from this program each year for the next five years," said Sawyer, who has 13 employees. "If there are 150 jobbers in Alabama, they could use 500 men from this program right now, this figure including the replacement in some cases of incompetent or otherwise unsatisfactory help."

Students at Anniston—and at the other pilot schools to be set up—go to school half a day and then work half a day at a jobber's. The jobber has a copy of the school work and coordinates it with on-the-job training. For example, Executive Secretary John W. Rooney of AWAA pointed out, when a student has been studying freight bills, then on that same day while working he will see the actual bills, how they should be checked, figured, etc.

The student-employee is assigned to a particular person in the jobber's organization for instruction and questions, preferably the jobber himself. This same person works closely with the school teacher, gives the student his grade for that portion of his work, makes and receives suggestions about the student's progress, etc.

From the Anniston pilot study it was soon learned that some prepared texts were necessary. AWAA's education committee,

J. K. Bynum (center), Atlanta (Ga.) district manager for The Electric Autolite Co., takes possession of his special racing cap from Edmund T. Duffy (right), director of replacement sales, at a recent sales parley in Toledo kicking off the company's 1960 sales and merchandising programs. At left is R. E. "Bob" Simmons of Dallas, Southern regional sales manager.



headed up by Sam Meadows of Parts Service Co., Montgomery, and Sawyer as vice chairman, joined with three educators in Montgomery—J. F. Ingram, state vocational training director, and Mrs. Donna Seay and Miss Anacile Riggs, coordinators in the two Montgomery high schools—in drafting work study lessons.

There will be approximately 60 lessons, drafted by these educators who have used jobbers as consultants. The ladies are being paid for this work by AWWA.

"These lessons will be ready for the fall term this year in Anniston, where the pilot course will continue for another full year," said Executive Secretary Rooney. "With these prepared studies we will be in a much better position to give the students a more complete and coordinated course. In addition, if everything goes according to schedule, we can take these same lessons and experience and in 1961 extend the program to a number of high schools over the state."

During the second year of the course the school class work will be supplemented by various jobbers who will teach the catalog to the senior student-employees.

In taking on a student-employee the jobber obligates himself to work the boy three hours a day for five days a week for the junior and senior years. He agrees to pay him 75 cents an hour. If he works him during the summer—and this is not obligatory—he must pay him \$1 an hour minimum. He is not obligated to hire the student after he graduates. The student is obligated to give satisfactory work, pass his studies and to satisfy both the employer and the school coordinator.

This by-product of the program was cited by Rooney:

At the present time, when a jobber hires a new man on a trial-and-error basis, he must pay him the minimum wage of \$1 an hour.

LUBRICATION

"NEW HERE?"

motor jobs turn out sweeter
when you install...

Manley
airchrome valves
and springs

Manley Valve Corporation, 15th St. & Fairmount Ave.,
Philadelphia 30, Pa. Supplier to leading original
equipment manufacturers. District Sales Representa-
tives: Hirshig-Brantley Co., Jacksonville; J. S. Connell
Co., Dallas.



Attending a recent Grizzly Brake Division sales meeting in Chicago were (l. to r.): front row, John Heath, sales coordinator; C. A. Laughren, Rocky Mountain division; W. O. Sanders, eastern regional sales manager; H. H. Swain, director of sales; V. L. Richards, Atlanta, Ga., division; H. M. Forster, Richmond, Va., division; back row, Kenneth W. Maxwell, assistant director of sales; C. W. Tremittiere, Charleston, W. Va., division; D. L. Coil, Louisville, Ky., division; F. M. Dover, Jr., Charlotte, N. C., division; A. L. Clark, Lexington, Ky., division, and Kenneth Stout, Oklahoma-Texas.

Photo
Courtesy Shipstad
and Johnson

IT TAKES
BOTH
TO DO THE
BEST
JOB!



"DA" DUAL ACTION

The "DA" has become known as the "Painter's tool" because it eliminates hand sanding in paint departments of body shops. It's the finest sander on the market for sanding prime coats, surfacer, or putty; for scuffing old finishes to remove oxidized paint or gloss . . . and NO MORE WET SANDING. Now, wet sanding jobs can be done dry because the unusual action of the "DA" cleans abrasive as it sands, and yet, creates no heat. Ask about our demonstrator kit with loan sander . . . try one in your shop.

"MITY-MIDGET"

The "Mity-Midget" is the most popular air-driven sanding machine on the market . . . for good reason. An excellent feather-edger, "Mity-Midget" is an orbital action block sander made by the originators of orbital action. It weighs only 4 pounds, yet has 25 square inches of abrasive area. Write today for complete information on these two sanders . . . You'll save money and time while you do the job better.



NATIONAL-DETROIT, INC.
ROCKFORD, ILLINOIS



He will work him the regular number of hours, which will cost him about \$50 a week. It will generally take him three to six months to determine accurately if the employee will make good.

"This can cost him a lot of money, and if the employee does not make good, the jobber has to begin all over again on the same trial-and-error basis," commented the veteran association executive.

"Under this program he will work the boy three hours per day at 75 cents per hour, or about \$12 per week. He will be kept in close contact with the employee and with the school coordinator. If the boy is not fitted, the weeding-out process will begin almost immediately. It will take him only days or weeks to find out what he wants to know, as against months at present.

"This savings is, of course, important, but it is incidental to our program, not the reason for it. Our goal is better employees for the jobbers and a continuing supply of them."

There are 320,000 jobs available in this replacement industry, he pointed out, yet "I know of no qualified parts men looking for jobs today, and the future looks even better."

Besides East Alabama Auto Parts, two other jobbers—Anniston Auto Parts and Cain, Blue & Combs—have student-employees. The fourth, Model City, has indicated a desire for one when he is available.

Dallas Store Opens Branch

Central Grinding & Auto Supply of Dallas, Texas, has opened a branch store at Richardson, owner Robert L. Norman announced.



Peter S. Innis has been named a regional manager of Fram Corp., Providence, R. I. Based in Houston, Texas, Innis will coordinate activities of the national account and jobber sales divisions in a 14-state area.

Mobile Company Adds Salesmen, Equipment

Two new salesmen have been added to the city force of Motor Parts & Supply Co., Inc., Mobile, Ala., President Lyman O. Weaver announced.

C. R. "Bud" Stone will contact service stations and independent garages, while W. B. "Buddy" Green, Jr., will handle car and truck dealer, fleet and industrial accounts. Bill Murat is an equipment specialist in sales and service.

Cliff Faggard has been named manager of D & W Auto Parts, Mobile, a wholly-owned subsidiary, and Frank Harper was transferred to the sales force of D & W Auto Parts of Jackson, Ala.

Texas Association Has Membership of 612

ADDITION of 23 firms has swelled the membership roster of the Automotive Wholesalers of Texas to 612, by far the biggest of any state group in the South or Southwest.

In 1956 membership stood at 522. In 1957, it was 533; in 1958, 545; and in 1959 it had grown to 558.

Van Norman Elects Mericka

William J. Mericka has been elected board chairman of Van Norman Industries, Inc., succeeding Donald P. Hess, who retired recently. A Van Norman director since November 1956, Mericka is president of Wm. J. Mericka & Co., Inc., a Cleveland securities firm.

Guaranteed Parts FIELD REPORT

"Ace" Marsteller, Owner
Bailey's Crossroads Service
Alexandria, Virginia, says:



"I added \$4400 to my volume in one year with the Guaranteed Parts Merchandiser Program!"

"What's more, the Guaranteed Program has me equipped to handle any ignition problem."

"Guaranteed's complete line sets me up for ignition service on trucks, sports cars, lawn mowers . . . anything! I've taken on a full-time tune-up man and he'll be busy . . . because I've found that ignition business is big business!"

Get the FULL STORY

- Free cabinets to dealers with purchase of parts.
- Complete catalogs and tune-up data on all types of engines
- Sleek, all-white cabinets look the part of super-service
- Tune-up banners and sales aids aimed at your customers

For details on all Guaranteed Parts Merchandisers, get this free manual from your nearest Guaranteed Distributor. Or, write to:

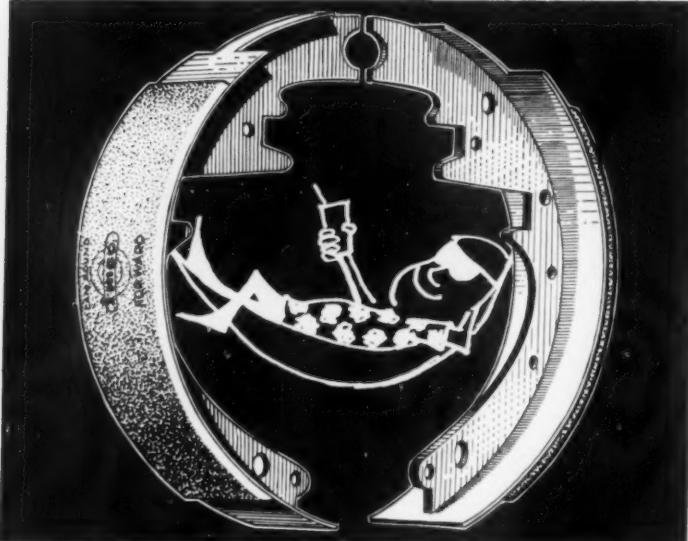


GUARANTEED PARTS CO., INC.

SENECA FALLS, NEW YORK



RELAX . . .
*you're safer with
 Imco brakes.
 You'll make
 more profit too!*



THE IMCO MFG. & SALES CORP.

BALTIMORE 2, MARYLAND

CAR AIR CONDITIONER AMAZING LOW PRICE . . .



THE Electro-Magic UNIVERSAL

- Completely refrigerated air conditioning at low, low price.
- Ideal for travelling men; fleet operators; truckers.
- Easily installed at any auto service repair shop.
- Fits any domestic model from 1954 . . . built to last a lifetime.
- Compact unit fits under dashboard . . . out of the way.

Order your superbly engineered Electro-Magic today.

ELECTRONICS, INC.
 60 Cherry Street, Vermillion S. D.
ELECTRO-MAGIC CAR AIR CONDITIONER
 Please rush additional information.
 Please ship me unit. Check enclosed.
 I am interested in dealership.

Name _____

Address _____

City _____

Car Make & Model. _____

Sells for ONLY

\$198⁰⁰

FOB Factory

Fed. excise tax incl.

Includes patented
 magnetic clutch, Elec-
 tro-Magic Condenser
 and Tecumseh HA-
 1000 Compressor.

**DEALERS WANTED!
 WRITE TODAY!**
 ELECTRONICS, INC.
 VERMILLION, S. D.



Robert T. Hilsmeier of Toledo, O., has been named territory manager for Merit Mufflers in Virginia, Tennessee, North Carolina, Maryland and the District of Columbia. Formerly field sales engineer for Herbrand Division, Bingham-Herbrand Corp., he will headquartered in the vicinity of Charlotte, N. C.

Mohawk Promotes Morris To Head Southwest

RALPH E. Morris, formerly western regional manager for The Mohawk Rubber Co., has been named manager of the Southwestern division with headquarters in Dallas, Sales Manager Tom Johnson announced.

"With the increased capacity of our Helena, Ark., plant," Johnson said, "we are able to serve Oklahoma, Texas, Colorado and New Mexico with new enthusiasm."

James E. Broadbent has been appointed manager of the mid-western division, which includes Kentucky and the Virginias. A 35-year-old native of Oklahoma, Charles W. Dunn, has been named assistant sales manager. Prior to joining Mohawk, he was a tire distributor in Dallas.

Postove Buys in N. C.

Lee Postove, formerly with United Motors Service Division, has purchased the interest of the late G. R. Shaver in Shaver Battery & Parts Co., Goldsboro, N. C., according to John Holler, secretary-treasurer.

South Carolinian Adds One

Marion Workman, formerly of Newberry, S. C., is a new counter-man for Holland Auto Supply, Greenville, S. C., Manager Ned Holland announced. James Bledsoe, inside man for ten years, is now city salesman.



"Rock" Rockafellow is shown explaining to South Carolina wholesalers why he has decided to become a W.D. His company gave this dinner meeting at a country club at Columbia on April 27.

Why This Jobber Became a W.D.

WHAT is the line of thinking behind a veteran jobber who decides to convert his company into a warehouse distributor?

One of the latest to take this step is The Parts Co., Columbia, S. C., which is altering itself, as of June 1, into a W.D. with the name

Factory illustration:

Let's start with a capital investment in shelf inventory
And multiply by 4 for inventory turnover
This produces annual purchases of
Now we will mark up $\frac{1}{2}$ for gross profit
This develops annual sales volume of
Now let's add one other factor—an additional discount of as much as 10%, available from the factory but not from a warehouse. On annual purchases of \$3,600 this amounts to gross profit of \$1,200 plus additional discount of \$360

Warehouse illustration:

We start with the same shelf inventory of But the closer availability of the warehouse and the more frequent calls by the warehouse salesman makes possible an inventory reduction of at least $\frac{1}{3}$

This produces a revised shelf inventory of Which we multiply by 6 for inventory turnover

And we develop annual purchases of Which we mark up $\frac{1}{2}$ for gross profit This develops annual sales volume of When we now compare the factory illustration with the warehouse illustration we find that the gross profit of \$1,200 is identical but at this point the factory illustration has the advantage because of the additional discount of

\$ 900.00 X4

\$3,600.00
\$1,200.00
\$4,800.00

\$ 360.00

\$1,560.00

\$ 900.00

\$ 300.00
\$ 600.00

X6

\$3,600.00
\$1,200.00
\$4,800.00

\$ 360.00

But wait one moment:

We must come back to the $\frac{1}{3}$ reduction in shelf inventory of

This could be invested in another line of merchandise with the warehouse and when multiplied by 6 for inventory turnover

We produce annual purchases of \$1,800.00 Which should be marked up $\frac{1}{2}$ for gross profit \$ 600.00

Thus developing in annual sales volume \$2,400.00

Now let's compare profit:

Factory illustration:	\$ 360.00
Additional discount	\$1,200.00
Annual gross profit	<hr/>

Total	\$1,560.00
-------	------------

Warehouse illustration:

Annual gross profit from \$600 shelf inventory \$1,200.00

Annual gross profit from \$300 shelf inventory \$ 600.00

Total	\$1,800.00
-------	------------

The foregoing illustrations do not attempt to take into consideration the cost of carrying more inventory than you need. Some of these costs are:

1.—Interest on the money involved.

2.—Cost of storage.

3.—Cost of insurance.

4.—Cost of taxes.

5.—Increased obsolescence factor.

Our national trade association, ASIA, states that the minimum cost of carrying inventory is 12¢ for every \$1 of inventory.

Auto Parts Warehouse Co. at the same site.

In an interview with SOUTHERN AUTOMOTIVE JOURNAL, W. H. "Rock" Rockafellow, president, explained that it was the opinion of his company that "Only by concentrating both the financial strength as well as the managerial capacity in one single direction can the most efficient results be secured."

Rockafellow, who is a past president of the Virginias-Carolinas Automotive Wholesalers Association, a former regional vice president of the one-time NSPA and a founder of the South Carolina Automotive Wholesalers Association, also asserted:

"Jobbers utilizing the services of warehouse distributors can realize profits not otherwise obtainable," and he illustrated his views by comparing profits obtainable as a result of warehouse purchasing as opposed to direct factory purchasing (as shown in the accompanying figures with this article).

The influx of foreign cars and the introduction of U.S.-made compacts, he said, "will greatly increase the 'breadth' of inventory requirements in every line of merchandise handled, thus necessitating additional capital requirements.

"It is definitely an erroneous concept to believe that the facilities of a warehouse distributor can be utilized only by a small jobber."

Here is Rockafellow's "economic justification of warehouse distribution:"

NODULAR CAST CRANKSHAFT



Crankshafts can be reclaimed satisfactorily by our ARCWELL Process with a fused Chrome-Nickel application.

Top photo—Thrust surface repairing.
Bottom—Complete shaft reclaimed.



Cut replacement costs
by refinishing.
Quality controlled.

STANDARD CRANKSHAFT COMPANY

PLANT AND OFFICE
117 Southside Drive
CHARLOTTE, N.C.
Phone JA 3-2202

928 23rd St. South
BIRMINGHAM, ALA.
Phone FA 4-7862

1078 W. Adams St.
JACKSONVILLE, FLA.
Phone ELGIN 6-1444

Dayton Appoints Kimbrell

John W. Kimbrell has been appointed district manager for Dayton Industrial Products Co., handling automotive wholesaler accounts in Texas, Louisiana and Mississippi out of company offices in Dallas. Previously Kimbrell was with The Thermoid Co. and prior to that held sales posts with a number of automobile supply firms in Fort Worth.

Sterling Aluminum Appoints Mize

Harry R. Mize has been appointed vice president in charge of replacement sales for Sterling Aluminum Products, Inc., according to President E. W. Bromwich. Formerly sales manager for Allied Automotive Parts Co., Detroit, Mize joined Sterling in August 1957.

Chicago Rawhide Names Krebs

Dale C. Krebs, formerly with the sales staff of Manheim Mfg. and Belting Co., Manheim, Pa., has been appointed to the Service Sales Division of Chicago Rawhide Mfg. Co. With headquarters in St. Louis, Krebs will have charge of a territory including Missouri from Jefferson City south and east.

Oklahoma Store Names Pickens

William E. Pickens has been appointed general manager of Severin Supply Co. of Oklahoma City, Okla., according to C. L. Severin, treasurer. A native of Oklahoma, Pickens for the past ten years was district representative of The DeVilbiss Co.

Kentucky Store Ups Brewer

D. C. Brewer, for the past 15 years in charge of equipment repairs and counterman for Womwell Automotive Parts, Lexington, Ky., has been promoted to outside salesman covering part of the company's Lexington accounts.

Amarillo Store Opens Branches

First Supply Co. of Amarillo, Texas, has opened two branch stores, one at Stratford and the other in Clarendon.

Al Eisenhauer, formerly with the Perry Shankle Co. of San Antonio, Texas, has joined the W. W. Auto Parts Co. of that city.

Speed Truck Tire Changes

WITH

JOB-DESIGNED
KEN-TOOLS

EASIER . . . QUICKER

Quality tools for trucks, buses, farm tractors, and aircraft. Hand forged from chrome nickel alloy steel. Tougher, last much longer!

T-19 24" Truck and Bus Straight Spoon

T-20 24" Truck and Bus Curved Spoon

T-29

18" Tool for starting first
bead down over rim

T-48A

40" Tool for removing and
replacing lock rings

JOB-DESIGNED
KEN-TOOL

LOCK RING REMOVERS
stand up under tremendous leverage

T-23 24" For Firestone RD, R-1 Rim

T-25

New 18" Ring Remover for 5° Firestone Rims

T-22 18" Combination Lock Ring Tool

T-27 18" Ring Tool for R-1 Rims

SEE YOUR JOBBER on the complete line of Job-Designed Ken-Tools. Forged by the largest exclusive manufacturer of top-quality Tire-changing Tools and Equipment. THE KEN-TOOL MFG. CO., AKRON 5, OHIO.

JOB-DESIGNED
KEN-TOOLS

TIRE-CHANGING
TOOLS KNOWN, USED
AROUND THE WORLD

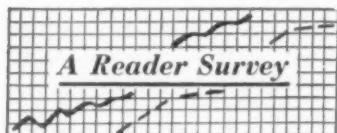
Sales of Tire Chains Keep Sales Up; Better Weather Expected As Pickup

If every jobber had been overstocked with chains, his volume would have fared as well the first quarter of this year as did those who found themselves prepared for the extremely rough weather which visited many areas of the South and Southwest.

As it was, the unusually heavy layers of ice and snow contributed greatly to a decline—generally only a few percentage points—in sales as compared with the same quarter of last year, according to reports from 38% of the wholesalers answering a survey mailed to 350.

Fifty-two per cent said their volume was up, often by only a small amount, while ten per cent listed the same sales.

One Maryland executive reported his business down in January and February, but the 30% climb



in March enabled the firm to top off the quarter with an over-all rise of ten per cent.

"Winter weather and sales of chains plus a good deal of equipment made March exceedingly good," he commented.

Business was up ten per cent for a Baltimore company "due to snow."

A well-known North Carolinian reported:

"Sales increased 39% over the 1959 first quarter. Reason was the winter items and fact that we moved into larger quarters with adequate parking last November."

A Birmingham jobber said his sales were up 15%.

"We have added another outside salesman," he said, "and find that the business is still there if you go after it."

"The problems remain the same. Due to the complexity of the modern cars, we find that it is hard to get the dealers to stock any parts. That calls for more hot-shot deliveries. Our trucks stay on the go constantly. Collections are still rough, but we hope that good weather will help on this problem."

The two per cent increase for a Shenandoah Valley wholesaler in Virginia was credited to "severe weather creating chain business."

This jobber continued:

"I read where many jobbers predict for themselves six to ten per cent increases for 1960. Discounting some unusual circum-

stance in a given area, it is my belief that in the face of the multiplicity of small jobbers being opened up, we will have to be satisfied with about a three per cent increase."

A decline in the coal market was blamed for a drop of five per cent in sales for a company in western Virginia.

Sales were off for a south Alabamian who covers a wide territory because:

"We have had rain, rain, rain since September which cost us a

WHEEL CYLINDER LEAKS
on Late Model Chrysler Made Cars
by using
TRU-TORQUE
Dual Action Expanders & Cups

When brake shoe adjustments are released, cups cover the hydraulic ports in the cylinder wall and do not return to normal position until brakes are bled. This bypasses fluid around back of cups causing leaks.

Dual Action Expanders ALWAYS return cups to their normal operating position BEFORE brakes are bled. This assures Smooth, Easy Actuation of cups that serve for years in the TRU-TORQUE TRADITION.

With conventional cups and expanders it is not possible to release adjustments to replace drums without danger of leaks, because cups stay in, over cylinder ports, permitting fluid to bypass around cups and pistons.

With TRU-TORQUE Dual Action Expanders and Cups this cannot happen (if you adjust shoes to drum before bleeding) because cups return to normal operating position with brake shoes.

Available at Your Local Jobber

TRU-TORQUE
OTTO-ITEMS, INC.
1200 Reco Ave. St. Louis 26, Mo.



Economical...
1916
Cups & Expanders
List Price \$1.10 per wheel
Cups, Expanders
and Boots
List Price \$1.60 per wheel
Cups, Expanders,
Boots & Pistons
List Price \$2.60 per wheel

ACE®

CUSHION AIR

COOLEST CUSHION COMFORT
ON THE ROAD TODAY!

THE GENEROUS
ACE REGULAR



THE EXTRA
ACE KING



Springy, rust-resisting coiled wire, custom fitted in superb plastic coated stripe fabric. All sizes available in Red, Blue, Green or Black.

BETTER BUY BEST...
BUY ACE

FOR OTHER STYLES, PATTERNS AND
SPRING CONSTRUCTION, WRITE —



ACE RUBBER
COMPANY

P. O. BOX 6147
DALLAS, TEXAS

crop and put a stop to all pulpwood hauling because the woods are too wet and trucks bog down. Business is awfully slow and so are collections."

All business is off in the Tallahassee, Fla., area, said one respondent. But with a change in the weather, he added, "we expect the situation to begin showing some improvement."

Eaton Appoints Sala Aftermarket Manager

WILLIAM E. Sala, formerly chief engineer—accessories and special products, for the Heater Division of Eaton Mfg. Co., has been appointed manager of aftermarket products.

Ferd W. Fisher, former chief engineer—heating and air conditioning, has been promoted to chief engineer of all the division's products. Prior to joining Eaton three years ago, Sala was associated with The Electric Autolite Co. Fisher has been with the company since 1948.

Russell Mfg. Elevates Three Executives

Two sales managers have been announced by H. C. Morton, new vice president of the Friction Materials Division of Russell Mfg. Co.

T. Joseph Keane has been named sales manager of the automotive and aero equipment division, while William D. Schenck is sales manager of the automotive replacement division. Keane joined the organization in 1929, Schenck in 1951.

Warner-Patterson Names Brooks

W. J. Brooks of Aaron & Bell Co., Atlanta, Ga., has been named sales representative for Warner-Patterson Co., Chicago, in Virginia, the Carolinas, Georgia, Florida, Alabama, Mississippi and Tennessee.

Mississippian Adds Two Stores

Motor Supply Co., Meridian, Miss., opened two branch stores last month, one at Butler, Ala., and the other at Waynesboro, Miss., Executive Vice President K. P. Allen announced.

Gates Rubber line has recently been added by Walter S. White Auto Parts, Birmingham, Ala., according to President G. P. Rogers.



tire & tube
repairs do a
better job
FASTER!

Because they're designed to do a better repair job in less time per repair, Akro tire and tube repairs mean you can make that much more money on each repair job, and there's an Akro repair for every repair application. Ask your jobber about Akro and get started on the road to more profitable tire and tube repairing business!



DOUBLE CUSHION
TIRE PATCH



DUAL-DUTY
REPAIR CABINET



TUBELESS TIRE
REPAIR PLUGS



DUAL-DUTY COLD
VULCANIZING PATCHES



Liquid
RUBBER
BUFFER



PERMA-PATCH
TIRE REPAIR



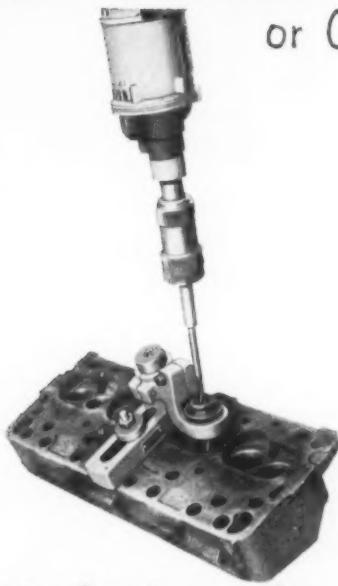
"Automotive Service and
Know-How Since 1929"

**BUXBAUM
PRODUCTS CO.
CANTON 2, OHIO**

Install Valve Guides

or Oversize Stem Valves with K.O. Lee

Valve Guide Reaming Tools



The K. O. Lee valve guide reaming tools are designed to service late model engines which have valve guides cast as part of the cylinder head. These tools can be used to install oversize stem valves or replaceable guides.

The K. O. Lee reamer guide provides a true alignment with original guide bore using Lee self-expanding pilots. The reamer is held rigid with reaming bushing during reaming operation. Simple to operate and extremely accurate.

Oversize reamers are used to ream out the valve guides for oversize stem valves. Engine and valve manufacturers offer at least three sizes of oversize stem valves.

When old valves are still serviceable, it is more economical to install replaceable valve guides. Roughing and finishing reamers used with the K. O. Lee reamer guide, accurately cut the recess for a replaceable guide.

Write for descriptive literature which includes a listing of replaceable guides and special sets available.

K. O. Lee Company, Aberdeen, South Dakota

WHY USE A CANFUL WHEN—

A CAPFUL
IS ALL
YOU NEED



POWER-PAL 10^{PLUS}

The all-purpose liquid super-charger!

A CAPFUL IN THE GAS TANK

CLEANS CARBURETORS

Removes gums, varnishes, carbons.
Rids engines of harmful deposits.
Keeps fuels free of moisture.

Now—A.S.T.M. tests prove Power-Pal products disperse and remove more gums in fuels than other leading brands tested.

MOTIVE SPECIALTIES DIVISION
NUTMEG CHEMICAL COMPANY
130 HAVEN ST. NEW HAVEN, CONNECTICUT

For free sample, write Dept. SAJ

Also manufacturers of POWER-PAL for Diesel Engines

"since we switched to
Go-Jo Creme Hand Cleaner
we have had no new cases
of Industrial Dermatitis,"



says Victor D. Von Gunten,

Service Manager, HENRY MOTORS, INC., Akron, Ohio.

► CLEANS HANDS "DINNER-TABLE CLEAN" IN 30-SECONDS!

Henry Motors, Inc. is just one of thousands of automotive establishments that protects its employees against industrial dermatitis by providing Go-Jo Creme Hand Cleaner dispensers in convenient locations.

► PROTECTS WITH MEDICALLY APPROVED GT-7!

...a powerful antiseptic.

► CONTAINS SOOTHING EMOLlients TO AID IN
PREVENTING SKIN DRYING!



GOJER INC., Dept. SAJ-56
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- LEE HUGHES, 1200 Park Hills Court, Louisville, Kentucky
- J. W. LOVELADY, 1312 W. T. Waggoner Blvd., Ft. Worth, Texas
- E. J. ROELANDT & ASSOC., 5941 Baum Blvd., Pittsburgh, Penna.



Tool Tips for the Mechanic

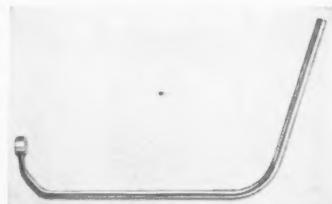
Transmission Seals on MGA Sports Car

Check the SNAP-ON® S-8672C Drive Shaft/Bushing Puller for working on the transmission seals of the MGA sports car. It does such a good job that every import car agency should have one. You can see it on page 68 of SNAP-ON Catalog W.

Power Steering on GM Products

Mechanics working on power steering of the 1959 Cadillac, Oldsmobile, Buick and Pontiac lines need the SNAP-ON TQ-1 Torqometer® (0-15 inch pounds) to check the pull load. See pages 34-35 of Catalog W.

NEW TOOL



Snap-on S-8564B
Distributor Wrench

Here's a tool that helps you make adjustments easily and safely on all late model Ford, Edsel, Mercury and Lincoln distributors. The handle is offset at 110 degrees to clear obstructions such as coil, distributor leads, etc., thus minimizing danger of shocks. Provides faster, more efficient service. Has double hex $\frac{1}{2}$ -inch opening at right angle to shank to clear wires and tubes. Your SNAP-ON man can show you how this new tool works in your own shop. Ask him.

Brake Work on 1959 Chevrolets

If you've ever adjusted brakes on these cars, you know there isn't much room to work. Next time one comes in, try the S-9153-B Pontiac Brake Wrench. You'll think it was made special for the Chevy. It's on page 72 of the SNAP-ON catalog.

1959 Chrysler Line Generator Pulley

This pulley is pressed on with an interference fit. It must be removed with a puller attached to a pulling groove at the front of the pulley. Pressure applied should not be more than 6,800 pounds. You can do the job easily and safely with the SNAP-ON CJ-950 Bearing Separator and CJ-60-R-1 and CJ-60-R-2 with two $1\frac{1}{2} \times \frac{3}{8}$ N.C. bolts. Page 101 of SNAP-ON catalog.

SNAP-ON TOOLS CORPORATION
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Max Hayes the Kingmaker Is Dead

By BILL HERBERT

Editor

MAX A. Hayes the Kingmaker is dead at 64.

The well-known North Carolina jobber was found dead April 11 at his mountain retreat on Lake Lure where many of the best names of the Southeast's automotive aftermarket had whiled away happy hours as his guests. He had been in ill health for months. His death was caused by a heart attack.

The chairman of the board of Hayes & Hopson, Inc., Asheville, was a Kingmaker because of his life-long pursuit of enjoying lifting

which he himself sought to avoid, except for committee work and directorships. He could make a speech when necessary, but he never asked for the spotlight.

Max Hayes talked often at his friends' backs, ever seeking to put in plugs which would promote their careers. Sometimes he was caught in the act and some have received honors which today they do not know were first suggested by the life-long Tarheel.

He and the late John S. Hopson founded the business in 1923 with four employees and about 2,500 feet of floor space. Since 1942 the firm has occupied its own four-story building with 39,000 square feet. Early this year Hayes assumed the chairmanship of the board and F. B. "Doc" Shuford moved up to the presidency.

Mrs. Ruth Hayes Garner, wife of O. L. "Pete" Garner, the latter a vice president of the company, survives.



his friends into the spotlight while he chose the dimmer edge of the light in which to work, often reconciling powerful personalities who otherwise were set to clash.

He was unable to stem the demanding tide several years ago and reluctantly accepted the presidency of the Southeast Automotive Show. Earlier he had managed to avoid that honor because he and his wife knew she was dying over a period of half a year.

But usually he served on nominating committees of the Virginias-Carolinas Automotive Wholesalers Association and the North Carolina Automotive Wholesalers Association and wrung a promise in advance from the presidential nominee to return him to that committee, thereby guaranteeing that he would be able to avoid honors which so many of his friends wanted to pour upon him. He was a founder of NCAWA and a long-time member of VCAWA. It was he who often, sometimes into the early morning hours, won over his friends to accepting offices in the show group and associations

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President Plant

Plant Resigns UMS Post To Head Texas Operation

THOMAS F. Plant has resigned as general sales manager of General Motors' United Motors Service to become president of Motive Parts of America, Inc., a new Gulf & Western subsidiary.

He is also a director of Gulf & Western and chairman of the executive committee, according to John Duncan, president of the Houston-based parent firm.

As head of the company's automotive parts distributing organization, Plant will coordinate the activities of four subsidiaries which operate a total of 34 warehouses and jobbing stores in Texas and New Mexico.

Headquartered in Gulf & Western's administrative offices in Houston, he will oversee Beard & Stone Electric Co. with headquarters in Houston and four stores in Texas; Car Parts Depot, with headquarters in El Paso and 17 stores in West Texas and New Mexico; Gulf Automotive Supply, with headquarters in Houston and nine stores in Texas, and Wood Tire and Supply, with headquarters in Huntsville and four stores in Central Texas. Executives now heading the four subsidiaries will continue in their present positions, Duncan said.

A native of Plant, Tenn., Plant joined the General Motors organization as a salesman for the AC Spark Plug Division in 1936. He was transferred to United Motors Service in 1939 as field manager of the New Orleans zone.

Tidmore of Texas Named Mayor

C. W. Tidmore of Tidmore Auto Parts, Athens, Texas, has been elected mayor of his city. The company has recently occupied a new place.

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Triple *

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Note good condition of RMC Heat Band around margin and seat even though surface of head is badly eroded.

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"Combination for Profits" Theme To Spark Tennesseans June 5-7

WITH "Combination for Profits" as its theme, the Automotive Wholesalers Association of Tennessee will meet June 5-7 at Castle in the Clouds atop Lookout Mountain near Chattanooga for its seventh annual convention.

E. H. Francois, general sales manager, AC Spark Plug Division of General Motors Corp., will address the group on "The Past, the Present and the Future." "Your Future in Anti-Freeze" will be the title of an address by Paul R. Smith, general sales manager of Peak Anti-Freeze Division of Commercial Solvents Corp.

Other speakers scheduled are J. L. "Jack" Wiggins, executive secretary of Automotive Service Industry Association; Dr. G. Herbert True of South Bend, Ind., writer, lecturer and research psychologist; Lloyd Lott, safety engineer and manager of Loss Prevention Department of Bruce Dodson and Co., and James S. Metcalf, public relations counselor.

A closed business session for jobbers only will be held Monday, June 6, from 9 to 10:30 a.m. At the same time B-44 Automotive Booster Club will host a general meeting of all Boosters, other representatives and visiting factory personnel. With these exceptions, the entire meeting will be "open."

A highlight of the meeting will be an all-jobber panel which will answer questions previously submitted and lead discussions from the audience on recognized problems.

Registration will take place from 2 to 4:30 p.m. Sunday, June 5, to be followed by a reception.

A buffet dinner and selection of convention king and queen are set for that evening.

Other entertainment will take the form of an outdoor barbecue on Monday evening, complete with a country party, square dance and costumes. The annual banquet and floor show are set for Tuesday evening.

Recreational activities available include swimming in a pool fed by mountain water, golf, shuffleboard, tennis, horseback riding, basketball and dancing.

George W. Kinnie of Knoxville is president and Keith Broyles is the executive secretary.

Attendance is expected to reach a record, possibly running higher than 300, officials of the association stated.

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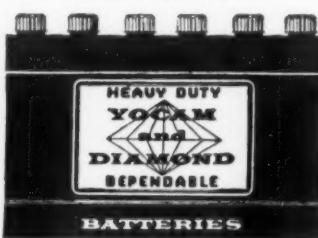
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Thomas S. Perry, Atlanta (Ga.) warehouse distributor and president of The Automotive Warehouse Distributors Association, was the principal speaker at the third annual jobber-booster meeting last month of Booster Club B-18 of Philadelphia. More than 150 persons attended the meeting.

Schaller Succeeds Plant At United Motors

HAROLD P. Schaller has been named general sales manager of United Motors Service Division of GM to succeed Thomas F. Plant, who resigned (see page 165).



This clinic to discuss exchange engines was held April 25 at Mobile, Ala. Shown at head table in foreground are (l. to r.): Lyman O. Weaver of Motor Parts & Supply Co., John Hampton of John Rogers Co., Atlanta, and "Chick" Roberts and Carl Davis, Jr., both of Davis Motor Supply Co. The meeting was held at the Battle House Hotel.

A. E. Swerzel has replaced Schaller as assistant general sales manager for the West.

Schaller, among other assignments, has been zone manager at Memphis and St. Louis. He joined UMS in Boston in 1924 and at one time was Eastern regional manager.

J. A. Swayze, a former zone manager at Charlotte, N. C., is the new Western regional manager.

Georgia Store Gets New House

A new building has recently been completed for Slack Toccoa Parts Co., Inc., Toccoa, Ga., according to W. H. Slack, Jr., of Slack Auto Parts Co., Gainesville.

M. H. DeKoch, formerly with **Terry Automotive**, is now city salesman for **The Motor Mart** of Dallas, Texas.

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ON CYLINDER WALLS



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C. C. Nunn
Nunn's Garage
3133 Glenwood Ave.
Decatur, Ga.



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INSTALLATION
PROBLEMS”

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Henry G. Bellack
Bellack Garage
Enumclaw, Wash.



“WE NEVER GAMBLE”

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Paul Huff Automotive
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